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PRODUCT SPECIFICATION MANUAL





“ Quality is never by chance
it is result of Intelligent efforts ”





PROFILE

- ▶ M/s. **S.K. CHEMICAL INDUSTRIES™ (MUMBAI) PVT. LTD.** established in **1968**, for development, manufacturing and marketing of Inorganic Metal Fine Chemicals.
- ▶ We have **experience of more than 50 years** in Inorganic Metal fine chemicals.
- ▶ We have Two (2) Units in Maharashtra (India).
- ▶ We produce **more than 300 Inorganic Chemical** with various grade.
- ▶ Our Chemical widely use in Lab Reagent, Catalogue Company, Electronic Industries, Pharma Intermediate, Bulk-Drug, Chemical Synthesis, etc...
- ▶ Our Product is well accepted in Domestic and International.
- ▶ Our Manufacturing units have large production capacity and advance testing equipments for analysis.
- ▶ We have **R & D facility** to develop new chemical as per customer's requirement.
- ▶ Our Company is **certified in ISO-9001:2015**
- ▶ Our reputation is very important to us and that is why we work with seriously well established partners.

RESEARCH & DEVELOPMENT

S.K. CHEMICAL INDUSTRIES™ (MUMBAI) PVT. LTD. is committed to serving the growing needs of a global marketplace and continues to develop strong relationships with international partners and customers. The collective wealth of experience of the research and development personnel in the fields of production, quality control, formulation, development, marketing and sales, augurs well for our future

S.K. CHEMICAL INDUSTRIES™ (MUMBAI) PVT. LTD. has assembled an innovative and highly experienced team to design and manufacture its products. With professional experience averaging more than a decade, the core members of our team are well versed in all aspects of manufacturing of chemicals.



PACKAGING

We have a Specious warehouse in our plant adjoining the packing department. We have an expert packaging team who pack as per UN approval guidelines. We pack our products in multiple of 1 kg To 50 kg.



CERTIFICATE OF ANALYSIS

MANUFACTURER OF INORGANIC METAL FINE CHEMICALS

CERTIFICATE OF ANALYSIS



Batch No. :EX2013-033
 Quantity :10.000 KGS
 Packing :0.500 Kgs X20 Nos In
 One Plastic Drum
 Drum Seal No.:12224
 Mfg date :28/08/2012
 Expiry date :27/08/2013

Date: 28/08/2012

TEST	STANDARD	RESULTS
Product	Lithium Chloride Anhydrous	Lithium Chloride Anhydrous
Formula	LiCl	LiCl
M. W.	42.39	42.39
Description	A hygroscopic white granular powder	Hygroscopic white granular powder
Assay (On Dry basis)	99.0% Min.	99.32%
Loss on drying at 120°C	2.0% Max.	0.63%
Sulphate (SO ₄)	0.01% Max.	0.002%
Iron (Fe)	0.001% Max.	0.0005%
Lead (Pb)	0.005% Max.	0.0005%

For **S.K. CHEMICAL INDUSTRIES™ (MUMBAI) PVT. LTD.**

Authorised Signatory

Reference
 01. PO No. :7325 dt. 27/08/2012
 02. G. Wt :13.000 Kg, T. Wt. :3.000 Kg, N. Wt. :10.000 Kg.

S.K. CHEMICAL INDUSTRIES™ (MUMBAI) PVT. LTD.
 818, 819, Corporate Avenue, Sonawala Road, Goregaon (E), Mumbai - 400 063, India.
 Telefax: +91 22 2686 3780 / +91 22 2685 3781 | E: info@skci.in | W: www.skci.in

CERTIFICATE OF GMP & ISO



QUALITY

PURE

Technically Pure
Grade Standard /
Chemically Pure /
We give only
chemical Purity
Guarantee.

LR

Lab Reagent Grade
Standard / Better
than Pure grade /
We give guarantee
of minimum assay
and some trace
impurities.

ACS

Chemical
meeting the
requirement of
the American
Chemical Society
Standard 11th
edition.

AR

Analytical Reagent
Grade / Better
than Pure and LR
grade / We give
guarantee of
minimum assay
and some more
trace impurities.

ULTRAPURE

Highest level
grade / We give
guarantee of
minimum assay
and total metal
trace impurities.

We perform as per below Instrument.

- ▶ Inductive Coupled Plasma - Optical Emission Spectrometer (ICP-OES) - Agilent Make
- ▶ Inductive Coupled Plasma Mass Spectrometer (ICP-MS)
- ▶ Potentiometric Titration - Agilent Make
- ▶ Potentiometric Titration - Veego Instruments
- ▶ Auto Titrator - Lab India
- ▶ Mettler Weighing Balance - Mettler
- ▶ Digital Moisture Balance - Contech Make
- ▶ Dona Single Pan Balance
- ▶ Digital with Auto Temperature P^H Meter
- ▶ Digital P^H Meter - Polmon Make
- ▶ Digital Burette - Eppenduf Maker
- ▶ Melting Point
- ▶ Nephelo Meter - Elico Make
- ▶ UV Cabinet For TLC
- ▶ TLC Kit
- ▶ Various Type of 'A' Class Glass Apertures
- ▶ Micro Kjeldahl Distillation Apertures - Borosil Make
- ▶ 10 Lt/hr Capacity DM Water Plant - Borosil Make
- ▶ 5 Lt/hr Capacity Distil Water Plant - Borosil Make
- ▶ Various Mesh Sieves
- ▶ Digital Karl - Fisher - Veego Instruments
- ▶ Automatic Potentiometer with KF
- ▶ Double Distil Water



Hazard Symbols

GHS Pictogram (According to Globally Harmonized System of Classification and Labelling of Chemicals) and EC Directive 1272/2008.

GHS Pitogram

FLAMMABLE



Hazard: Explosives substances or articles. Self reactive substances.
Precaution: A substances which either may explode under the effect of flame or which is more sensitive to shocks or friction than disturbance.

OXIDIZING



Hazard: Oxidizing substances. Organic peroxides.
Precaution: Oxidizing substances can cause fire in contact with combustible material or promote fire once started and impede fire fighting. Do not breath vapour.

IRRITANT



Hazard: Skin irritant. Eyes irritant. Sensitization (dermal).
Precaution: A Substance which may have an irritating effect on skin, eyes and respiratory organs, possibility of sensitzation by skin contact.

ENVIRONMENTAL HAZARD



Hazard: Environmentally toxicity.
Precaution: Toxic for aquatic organisms. May cause long term adverse effects in the aquatic environment. Do not allow to enter waters, waste water or soil.

HARMFUL



Hazard: Sensitization (Respiratory) Mutagenicity. Carcinogenicity. Reproductive toxicity. Target organ toxicity.
Precaution: A substance which if inhaled, ingested or allowed to penetrate the skin may involve limited health risks. Possible risk of irreversible effects by immediate, prolonged or repeated exposure to these substances.

TOXIC



Hazard: Acute toxicity.
Precaution: All contact with the human body must be avoided as it may cause severe or lethal damage to health. A substance which if inhaled, ingested or allowed to penetrate the skin may cause serious or chronic health damage and even death. Possible risk of irreversible damage by immediate, prolonges or repeated exposure.

CORROSIVE



Hazard: Skin corrosives. Eyes corrosive. Eyes corrosive to metals. Causes burns.
Precaution: Contact with these substances causes destruction of living tissues as well as equipment. Do not inhale vapour. Never add water to this product.

NO GHS



Non dangerous.

UNITS AND MEASUREMENTS

TO CONVERT	INTO	MULTIPLY BY
Kilograms	grams	1000.000
	ounces	35.274
	pounds	2.205
Gallons	pints	8.000
	litres	3.785
	quarts	4.000
Grams	ounces	0.035
	pounds	0.002
	kilograms	0.001
Miles	feet	5280.000
	yards	1760.000
	kilometres	1.609
Ounces	grams	28.350
	pounds	0.063
	kilograms	0.028
Pints	liters	0.473
	quarts	0.500
	gallons	0.125
Punds	grams	453.592
	ounces	16.000
	kilograms	0.454
Quarts	pints	2.000
	liters	0.946
	gallons	0.250
Inches	centimeters	2.540
	feet	0.083
	meters	0.025
	yards	0.028
Kilometers	feet	3280.840
	meters	1000.000
	miles	0.621
	yards	1093.610
Centimeters	inches	0.394
	feet	0.033
	meters	0.010
	millimeters	10.000
Yards	inches	36.000
	feet	3.000
	meters	0.914
	miles	0.001
Liters	cups	4.227
	pints	2.113
	gallons	0.264
	milliliters	1000.000
	quarts	1.057
Feet	centimeters	30.480
	inches	12.000
	meters	0.305
	miles	0.000
	yards	0.333
Meters	centimeters	100.000
	feet	3.281
	inches	39.370
	kilometers	0.001
	miles	0.001
	millimeters	1000.000
	yards	1.094

MESH SIZE CONVERSION TABLE

MESH SIZE	APPROXIMATE MICRON SIZE	APPROXIMATE MILLIMETERS	INCHES
4	4750	4.750	0.187
6	3350	3.350	0.132
8	2360	2.360	0.0937
12	1700	1.700	0.0661
16	1180	1.180	0.0469
20	850	0.850	0.0331
30	600	0.600	0.0234
40	425	0.425	0.0165
50	300	0.300	0.0177
60	250	0.250	0.0098
70	212	0.212	0.0083
80	180	0.180	0.007
100	150	0.150	0.0059
120	125	0.125	0.0049
140	106	0.106	0.0041
200	75	0.075	0.0029
230	63	0.063	0.0025
270	53	0.053	0.0021
325	45	0.045	0.0017
400	38	0.038	0.0015
635	20	0.020	0.0008
850	10	0.010	0.0004

UNITS OF MEASURE CONVERSION FACTORS

PERCENT	PARTS PER MILLION	PARTS PER BILLION	PARTS PER TRILLION
0.001%	10 ppm	-	-
0.0001%	1 ppm	1000 ppb	1000000 ppt
0.00001%	0.1 ppm	100 ppb	100000 ppt
0.000001%	0.01 ppm	10 ppb	10000 ppt
0.0000001%	0.001 ppm	1 ppb	1000 ppt
-	0.0001 ppm	0.1 ppb	100 ppt
-	0.00001 ppm	0.01 ppb	10 ppt
-	0.000001 ppm	0.001 ppb	1 ppt

ITEM WISE INDEX

SR. NO.	PRODUCT NAME	CAS No	Grade	Product No	Page No
01	Ammonium Bromide	12124-97-9	LR	21111	01
02	Ammonium Bromide	12124-97-9	AR	31112	01
03	Ammonium Bromide	12124-97-9	ACS	41113	01
04	Ammonium Carbonate	506-87-6	LR	21142	01
05	Ammonium Chloride	12125-02-9	LR	21132	01
06	Ammonium Chloride	12125-02-9	ACS	41134	01
07	Ammonium Iodide	12027-06-4	LR	21174	02
08	Ammonium Iodide	12027-06-4	AR	31174	02
09	Ammonium Iodide	7787-32-8	ACS	41175	02
10	Ammonium Molybdate Tetrahydrate	12054-85-2	LR	21196	02
11	Ammonium Molybdate Tetrahydrate	12054-85-2	ACS	41196	02
12	Ammonium Sulfate	7783-20-2	LR	21182	02
13	Ammonium Sulfate	7783-20-2	AR	31183	02
14	Ammonium Sulfate	7783-20-2	ACS	41184	02
15	Barium Acetate	543-80-6	LR	21262	03
16	Barium Acetate	543-80-6	AR	31263	03
17	Barium Acetate	543-80-6	ACS	41264	03
18	Barium Bromide Anhydrous	10553-31-8	PURE	112111	03
19	Barium Bromide Dihydrate	7791-28-8	LR	21212	03
20	Barium Carbonate	513-77-9	LR	21242	03
21	Barium Carbonate	513-77-9	AR	31243	03
22	Barium Carbonate	513-77-9	ACS	41244	04
23	Barium Chromate	10294-40-3	LR	21522	04
24	Barium Fluoride	7787-32-8	LR	21238	04
25	Barium Iodide Anhydrous	13718-50-8	PURE	112731	04
26	Barium Iodide Dihydrate	7787-32-9	LR	21273	04
27	Barium Iodide Dihydrate	7787-33-9	AR	31274	04
28	Barium Borate	26124-86-7	PURE	11216	04
29	Barium Nitrate	10022-31-8	LR	21252	04
30	Barium Nitrate	10022-31-8	AR	31253	04
31	Barium Nitrate	10022-31-8	ACS	41254	05
32	Barium Perchlorate Anhydrous	13465-95-7	PURE	112451	05
33	Barium Perchlorate Anhydrous	13465-95-7	LR	212451	05
34	Barium Perchlorate Trihydrate	10294-39-0	LR	22145	05
35	Barium Perchlorate Trihydrate	10294-39-0	AR	31246	05
36	Barium Sulphate	7727-43-7	AR	31283	05
37	Barium Thiosulphate	35112-53-9	LR	21293	05
38	Barium Thiosulphate	35112-53-9	AR	31293	05
39	Bismuth(III) Acetate (Bismuth Tri Acetate)	22306-37-2	PURE	10161	06
40	Bismuth(III) Bromide (Bismuth Tri Bromide)	7787-58-8	LR	20112	06
41	Bismuth(III) Borate	37233-77-5	AR	30119	06
42	Bismuth(III) Carbonate	513-77-9	LR	20142	06
43	Bismuth(III) Carbonate Hydrate Basic	5892-10-4	LR	50142	06
44	Bismuth(III) Chloride (Bismuth Tri Chloride)	7787-60-2	PURE	10131	06
45	Bismuth(III) Chloride (Bismuth Tri Chloride)	7787-60-2	LR	20132	06
46	Bismuth(III) Chloride (Bismuth Tri chloride)	7787-60-2	AR	30133	04
47	Bismuth(III) Chloride (Bismuth Tri chloride)	7787-60-2	ACS	30133	06
48	Bismuth(III) Hydroxide	10361-43-0	PURE	10148	07
49	Bismuth(III) Iodide (Bismuth Tri Iodide)	7787-64-6	LR	10173	07
50	Bismuth(III) Nitrate Pentahydrate	10035-06-0	LR	20152	07
51	Bismuth(III) Nitrate Pentahydrate	10035-06-0	AR	30153	07
52	Bismuth(III) Nitrate Pentahydrate	10035-06-0	ACS	40154	07

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SR. NO.	PRODUCT NAME	CAS No	Grade	Product No	Page No
53	Bismuth(III) Oxide (Bismuth Tri Oxide)	1304-76-3	LR	20107	07
54	Bismuth Oxy Chloride (Bismuth Sub Chloride)	7787-59-9	LR	50132	07
55	Bismuth Oxy Fluoride (Bismuth Sub Fluoride)	13520-72-4	LR	50138	07
56	Bismuth Oxy Iodide (Bismuth Sub Iodide)	7787-63-5	LR	50173	07
57	Bismuth(III) Nitrate Basic (Bismuth Oxy Nitrate)	10361-46-3	LR	50152	07
58	Bismuth(III) Nitrate Basic (Bismuth Sub Nitrate)	10361-46-3	AR	50153	08
59	Bismuth(III) Phosphate	10049-01-1	PURE	10126	08
60	Bismuth(III) Perchlorate Oxide Hydrate	66172-93-8	PURE	10185	08
61	Bismuth(III) Sulphate	7787-68-0	PURE	10181	08
62	Bismuth(III) Sulphate	7787-68-0	LR	20182	08
63	Bismuth(III) Sulphate	7787-68-0	AR	30183	08
64	Bismuth(III) Sulfide	1345-07-9	PURE	10187	08
65	Cadmium Acetate Anhydrous	543-90-8	PURE	104611	09
66	Cadmium Acetate Dihydrate	5743-04-4	LR	20462	09
67	Cadmium Acetate Dihydrate	5743-04-4	AR	30463	09
68	Cadmium Borate	51222-60-7	PURE	10416	09
69	Cadmium Bromide Anhydrous	7789-42-6	PURE	104111	09
70	Cadmium Bromide Tetrahydrate	13464-92-1	LR	20412	09
71	Cadmium Carbonate	513-78-0	LR	20442	09
72	Cadmium Carbonate	513-78-0	AR	30443	09
73	Cadmium Chloride Anhydrous (Cadmium Chlorided Dried)	10108-64-2	LR	204321	10
74	Cadmium Chloride Anhydrous (Cadmium Chlorided Dried)	10108-64-2	ACS	404341	10
75	Cadmium Chloride Hemipentahydrate	7790-78-5	LR	20432	10
76	Cadmium Chloride Hemipentahydrate	7790-78-5	AR	30433	10
77	Cadmium Chloride Hemipentahydrate	7790-78-5	ACS	40434	10
78	Cadmium Chloride Hydrate	654054-66-7	LR	10433	10
79	Cadmium Chloride Monohydrate	35658-65-2	LR	10432	10
80	Cadmium Fluoride	7790-79-6	PURE	10437	11
81	Cadmium Hydroxide	21041-95-2	PURE	10447	11
82	Cadmium Iodide	7790-80-9	LR	20472	11
83	Cadmium Iodide	7790-80-9	AR	30473	11
84	Cadmium Nitrate Tetrahydrate	10022-68-1	LR	20452	11
85	Cadmium Nitrate Tetrahydrate	10022-68-1	AR	30453	11
86	Cadmium Nitrate Tetrahydrate	10022-68-1	ACS	40454	11
87	Cadmium Oxide	1306-19-0	LR	20407	12
88	Cadmium Oxide	1306-19-0	AR	30408	12
89	Cadmium Perchlorate Hexahydrate	10326-28-0	LR	20445	12
90	Cadmium Sulphate Anhydrous	10124-36-4	LR	204821	12
91	Cadmium Sulphate Anhydrous	10124-36-4	AR	304831	12
92	Cadmium Sulphate Anhydrous	10124-36-4	ACS	404841	12
93	Cadmium Sulphate Octahydrate	7790-84-3	LR	20482	12
94	Cadmium Sulphate Octahydrate	7790-84-3	AR	30483	13
95	Cadmium Sulphate Octahydrate (Cadmium Sulphate Crystals)	7790-84-3	ACS	40484	13
96	Cadmium Sulfide	1306-23-6	LR	20487	13
97	Calcium Acetate Hydrate	114460-21-8	LR	218621	14
98	Calcium Acetate Hydrate	114460-21-8	AR	318631	14
99	Calcium Acetate Monohydrate	5743-26-0	AR	31863	14
100	Calcium Acetate Monohydrate	5743-26-0	ACS	41864	14
101	Calcium Bromide Anhydrous	7789-41-5	LR	218111	14
102	Calcium Bromide Hydrate	71626-99-8	PURE	11811	14

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SR. NO.	PRODUCT NAME	CAS No	Grade	Product No	Page No
103	Calcium Bromide Dihydrate	22208-73-7	LR	21811	14
104	Calcium Carbonate	471-34-1	LR	21842	15
105	Calcium Carbonate	471-34-1	AR	31843	15
106	Calcium Carbonate	471-34-1	ACS	41844	15
107	Calcium Iodide Hexahydrate	71626-98-7	PURE	11873	15
108	Calcium Perchlorate Anhydrous	13477-36-6	PURE	118451	15
109	Calcium Perchlorate Tetrahydrate	15627-86-6	AR	31845	15
110	Cesium Bromide	7787-69-1	PURE	13011	16
111	Cesium Bromide 99.9 %	7787-69-1	ULTRA PURE	53015	16
112	Cesium Chloride	7787-69-1	LR	23032	16
113	Cesium Chloride	7647-17-8	AR	33033	16
114	Cesium Chloride 99.9%	7647-17-8	ULTRA PURE	53035	16
115	Cesium Fluoride 99.9%	13400-13-0	ULTRA PURE	53039	16
116	Cesium Iodide 99.9%	7789-17-5	ULTRA PURE	53075	16
117	Cesium Nitrate	7789-18-6	PURE	13015	16
118	Cobalt(II) Acetate Tetrahydrate	6147-53-1	LR	20362	17
119	Cobalt(II) Acetate Tetrahydrate	6147-53-1	AR	30363	17
120	Cobalt(II) Acetate Tetrahydrate	6147-53-1	ACS	40364	17
121	Cobalt(II) Ammonium Sulphate Hexahydrate	13586-38-4	PURE	1031181	17
122	Cobalt(II) Bromide Anhydrous	7789-43-7	LR	203131	17
123	Cobalt(II) Bromide Hexahydrate	85017-77-2	LR	20313	17
124	Cobalt(II) Carbonate	12602-23-2	LR	20342	17
125	Cobalt(II) Chloride Anhydrous	7646-79-9	LR	203321	18
126	Cobalt(II) Chloride Hexahydrate	7791-13-1	LR	20332	18
127	Cobalt(II) Chloride Hexahydrate	7791-13-1	AR	30333	18
128	Cobalt(II) Chloride Hexahydrate	7791-13-1	ACS	40334	18
129	Cobalt(II) Fluoride Anhydrous	10026-17-2	PURE	103371	18
130	Cobalt(II) Fluoride Tetrahydrate	13817-37-3	PURE	20337	18
131	Cobalt (II) Hydroxide	21041-93-0	PURE	10348	18
132	Cobalt(II) Iodide Anhydrous	15238-00-3	PURE	103731	18
133	Cobalt(II) Nitrate Hexahydrate	10026-22-9	LR	20352	19
134	Cobalt(II) Nitrate Hexahydrate	10026-22-9	AR	30353	19
135	Cobalt(II) Nitrate Hexahydrate	10026-22-9	ACS	40354	19
136	Cobalt(II) Oxalate Anhydrous	814-89-1	PURE	103721	19
137	Cobalt Oxalate Dihydrate	5965-38-8	PURE	10372	19
138	Cobalt(II,III) Oxide (Cobalt Oxide)	1308-06-1	LR	20308	19
139	Cobalt(II,III) Oxide (Cobalt Oxide)	1308-06-1	AR	30309	19
140	Cobalt(II) Perchlorate Dihydrate	13455-31-7	LR	203451	20
141	Cobalt(II) Perchlorate Hexahydrate	13478-33-6	LR	20345	20
142	Cobalt(II) Sulphate Anhydrous	10124-43-3	PURE	103811	20
143	Cobalt(II) Sulphate Heptahydrate	10026-24-1	LR	20382	20
144	Cobalt(II) Sulphate Heptahydrate	10026-24-1	AR	30383	20
145	Cobalt(II) Sulphate Heptahydrate	10026-24-1	ACS	40384	20
146	Cobalt(II) Sulphate Monohydrate	60459-08-07	LR	203831	20
147	Cobalt(II) Thiocyanate	3017-60-5	PURE	10393	20
148	Copper(II) Acetate Anhydrous (Cupric Acetate Anhydrous)	142-71-2	LR	215621	21
149	Copper(II) Acetate Monohydrate (Cupric Acetate Monohydrate)	6046-93-1	LR	21562	21
150	Copper(II) Acetate Monohydrate (Cupric Acetate Monohydrate)	6046-93-1	AR	31563	21
151	Copper(II) Acetate Monohydrate (Cupric Acetate Monohydrate)	6046-93-1	ACS	41564	21
152	Copper(II) Bromide (Cupric Bromide)	7789-45-9	LR	21512	21
153	Copper(II) Hydroxide Carbonate (Cupric Carbonate Basic)	12069-69-1	LR	21542	21

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SR. NO.	PRODUCT NAME	CAS No	Grade	Product No	Page No
154	Copper(II) Hydroxide Carbonate (Cupric Carbonate Basic)	12069-69-1	AR	31543	21
155	Copper(II) Chloride Anhydrous (Cupric Chloride Anhydrous)	7447-39-4	LR	215321	22
156	Copper(II) Chloride Dihydrate (Cupric Chloride Dihydrate)	10125-13-0	LR	21532	22
157	Copper(II) Chloride Dihydrate (Cupric Chloride Dihydrate)	10125-13-0	AR	31534	22
158	Copper(II) Chloride Dihydrate (Cupric Chloride Dihydrate)	10125-13-0	ACS	41535	22
159	Copper(II) Hydroxide (Cupric Hydroxide)	20427-59-2	PURE	11546	22
160	Copper(II) Nitrate Trihydrate (Cupric Nitrate Trihydrate)	10031-43-3	LR	21552	22
161	Copper(II) Nitrate Trihydrate (Cupric Nitrate Trihydrate)	10031-43-3	AR	31553	22
162	Copper(II) Nitrate Hemipentahydrate (Cupric Nitrate Hemipentahydrate)	19004-19-4	LR	21551	23
163	Copper(II) Oxalate Hemihydrate (Cupric Oxalate Hemihydrate)	814-91-5	PURE	11571	23
164	Copper(II) Oxide (Cupric Oxide Black)	1317-38-0	LR	21507	23
165	Copper(II) Oxide (Cupric Oxide, black)	1317-38-0	AR	31508	23
166	Copper(II) Oxide (Cupric Oxide, black)	1317-38-0	ACS	41509	23
167	Copper(II) Oxide Grain (Cupric Oxide, black, grain 5-10 mm)	1317-38-0	PURE	11507	23
168	Copper(II) Perchlorate Hexahydrate (Cupric Perchlorate Hexahydrate)	10294-46-9	PURE	11545	23
169	Copper(II) Phosphate Anhydrous (Cupric Phosphate)	7798-23-4	PURE	11526	24
170	Copper(II) Sulphate Anhydrous (Cupric Sulphate Anhydrous)	7758-98-7	PURE	115811	24
171	Copper (II) Sulphate Anhydrous (Cupric Sulphate Anhydrous)	7758-98-7	LR	215821	24
172	Copper(II) Sulphate Anhydrous	7758-98-7	AR	315831	24
173	Copper(II) Sulphate Pentahydrate	7758-99-8	LR	21582	24
174	Copper(II) Sulphate Pentahydrate	7758-99-8	AR	31583	24
175	Copper(II) Sulphate Pentahydrate	7758-99-8	ACS	41584	24
176	Copper(II) Sulfide (Cupric Sulfide)	1317-40-4	PURE	11586	24
177	Indium(III)Acetate	251114-58-3	PURE	12261	25
178	Indium(III)Acetate 99.999%	251114-58-3	ULTRA PURE	52265	25
179	Indium(III)Bromide	13465-09-3	PURE	12211	25
180	Indium(III)Bromide 99.999%	13465-09-3	ULTRA PURE	12213	25
181	Indium(III)Chloride	10025-82-8	PURE	12231	25
182	Indium(III)Chloride 99.999%	10025-82-8	ULTRA PURE	12235	25
183	Indium(III)Fluoride	7783-52-0	PURE	12237	25
184	Indium(III)Fluoride 99.999%	7783-52-0	ULTRA PURE	12240	25
185	Indium(III)Iodide	13510-35-5	PURE	12273	25
186	Indium(III)Iodide 99.999%	13510-35-5	ULTRA PURE	12275	25
187	Indium(III)Nitrate xH ₂ O	10101-63-0	PURE	11473	26
188	Indium(III)Nitrate xH ₂ O 99.999%	207398-97-8	ULTRA PURE	12255	26
189	Indium(III)Sulphate	13464-82-9	PURE	12281	26
190	Indium(III)Sulphate 99.999%	13464-82-9	ULTRA PURE	12285	26
191	Lead(II) Acetate Trihydrate	6080-56-4	LR	21462	27
192	Lead(II) Acetate Trihydrate	6080-56-4	AR	31463	27
193	Lead(II) Acetate Trihydrate	6080-56-4	ACS	41464	27

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SR. NO.	PRODUCT NAME	CAS No	Grade	Product No	Page No
194	Lead(II) Bromide	10031-22-8	PURE	11421	27
195	Lead(II) Carbonate	598-63-0	LR	21442	27
196	Lead(II) Carbonate Basic	1344-36-1	ACS	41444	27
197	Lead(II) Chloride Anhydrous	7758-95-4	LR	21431	27
198	Lead(II) Chloride Anhydrous	7758-95-4	AR	31431	28
199	Lead(II) Fluoride	7783-46-2	LR	21437	28
200	Lead(II) Iodide	10101-63-0	PURE	11473	28
201	Lead(II) Nitrate	10099-74-8	LR	21453	28
202	Lead(II) Nitrate	10099-74-8	AR	31454	28
203	Lead(II) Nitrate	10099-74-8	ACS	41455	28
204	Lead(II) Perchlorate Trihydrate	13453-62-8	LR	21446	29
205	Lead(II) Perchlorate Trihydrate	13453-62-8	ACS	41446	29
206	Lead(II) Sulphate	7446-14-2	LR	21482	29
207	Lead(II) Sulfide	1314-87-0	LR	21486	29
208	Lead(II) Thiocyanate	592-87-0	LR	21491	29
209	Lithium Acetate Anhydrous	546-89-4	PURE	102611	30
210	Lithium Acetate Dihydrate	6108-17-4	LR	20262	30
211	Lithium Acetate Dihydrate	6108-17-4	AR	30263	30
212	Lithium Benzoate	553-54-8	LR	20228	30
213	Lithium Bromide Anhydrous	7550-35-8	LR	202121	30
214	Lithium Bromide Anhydrous	7550-35-8	AR	302131	30
215	Lithium Carbonate	554-13-2	ACS	40244	30
216	Lithium Chloride Anhydrous	7447-41-8	LR	202321	30
217	Lithium Chloride Anhydrous	7447-41-8	AR	302331	31
218	Lithium Chloride Anhydrous	7447-41-8	ACS	402341	31
219	Lithium Chloride Monohydrate	85144-11-2	LR	20233	31
220	Lithium Chromate Dihydrate	14307-35-8	LR	20222	31
221	Lithium Dichromate Hydrate	52478-50-9	LR	10222	31
222	Lithium Citrate Anhydrous (Tri-lithium Citrate Anhydrous)	919-16-4	PURE	102681	31
223	Lithium Citrate Tetrahydrate (Tri-lithium Citrate Tetrahydrate)	6080-58-6	LR	20268	31
224	Lithium Fluoride	7789-24-4	LR	20238	31
225	Lithium Iodide Hydrate (Lithium Iodide Monohydrate)	85017-80-7	LR	202731	32
226	Lithium Iodide Trihydrate	7790-22-9	LR	20273	32
227	Lithium Metaborate Anhydrous	13453-69-5	LR	20217M	32
228	Lithium Metaborate Dihydrate	15293-74-0	LR	20218M	32
229	Lithium Metaborate Dihydrate	15293-74-0	AR	30218M	32
230	Lithium Nitrate Anhydrous	7790-69-4	LR	202521	32
231	Lithium Oxalate Anhydrous	553-91-3	PURE	102721	32
232	Lithium Perchlorate Anhydrous	7791-03-9	LR	202451	32
233	Lithium Perchlorate Anhydrous	7791-03-9	ACS	402461	32
234	Lithium Perchlorate Anhydrous	7791-03-9	ULTRA PURE	502471	33
235	Lithium Perchlorate Trihydrate	13453-78-6	LR	20245	33
236	Lithium Perchlorate Trihydrate	13453-78-6	ACS	40246	33
237	Lithium Phosphate Anhydrous	10377-52-3	PURE	102261	33
238	Lithium Phosphate Monobasic	13453-80-0	LR	20227	33
239	Lithium Phosphate Monobasic (Lithium Di-hydrogen Phosphate)	13453-80-0	AR	30227	33
240	Lithium Sulphate Anhydrous	10377-48-7	LR	202821	33
241	Lithium Sulphate Monohydrate	10102-25-7	LR	20282	33
242	Lithium Sulphate Monohydrate	10102-25-7	AR	30283	33
243	Lithium Sulphate Monohydrate	10102-25-7	ACS	40284	34
244	Di-lithium Tetraborate Anhydrous (Di-lithium Tetraborate)	12007-60-2	LR	20218T	34
245	Di-lithium Tetraborate Anhydrous (Di-lithium Tetraborate)	12007-60-2	AR	30219T	34
246	Lithium Tetraborate Anhydrous	12007-60-2	ACS	40219T	34

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247	Magnesium Acetate Anhydrous	142-72-3	LR	206621	35
248	Magnesium Acetate Anhydrous	142-72-3	AR	306631	35
249	Magnesium Acetate Tetrahydrate	16674-78-5	LR	20662	35
250	Magnesium Acetate Tetrahydrate	16674-78-5	AR	30663	35
251	Magnesium Acetate Tetrahydrate	16674-78-5	ACS	40664	35
252	Magnesium Bromide Hexahydrate	13446-53-2	LR	20612	35
253	Magnesium Bromide Hexahydrate	13446-53-2	AR	30613	36
254	Magnesium Chloride Hexahydrate	7791-18-6	LR	20632	36
255	Magnesium Chloride Hexahydrate	7791-18-6	AR	30633	36
256	Magnesium Chloride Hexahydrate	7791-18-6	ACS	40634	36
257	Magnesium Chromate Pentahydrate	16569-85-0	PURE	10621	36
258	Magnesium Iodide Anhydrous	10377-58-9	PURE	106731	36
259	Magnesium Nitrate Hexahydrate	13446-18-9	LR	20652	36
260	Magnesium Nitrate Hexahydrate	13446-18-9	AR	30653	37
261	Magnesium Nitrate Hexahydrate	13446-18-9	ACS	40654	37
262	Magnesium Perchlorate Hexahydrate	13446-19-0	LR	20645	37
263	Magnesium Perchlorate Hydrate	64010-42-0	LR	206451	37
264	Magnesium Sulphate Heptahydrate	10034-99-8	LR	20682	37
265	Magnesium Sulphate Heptahydrate	10034-99-8	AR	30683	37
266	Magnesium Sulphate Heptahydrate	10034-99-8	ACS	40684	37
267	Manganese(II) Acetate Anhydrous	638-38-0	PURE	116611	38
268	Manganese(II) Acetate Tetrahydrate	6156-78-1	LR	21662	38
269	Manganese(II) Acetate Tetrahydrate	6156-78-1	AR	31663	38
270	Manganese(II) Bromide Tetrahydrate	10031-20-6	LR	21612	38
271	Manganese(II) Bromide Tetrahydrate	10031-20-6	AR	31613	38
272	Manganese(II) Bromide Anhydrous	13446-03-2		116131	38
273	Manganese(II) Carbonate	598-62-9	LR	21642	38
274	Manganese(II) Carbonate	598-62-9	AR	31643	38
275	Manganese(II) Chloride Anhydrous	7773-01-5	LR	216321	39
276	Manganese(II) Chloride Dihydrate	20603-88-7	LR	11631	39
277	Manganese(II) Chloride Tetrahydrate	13446-34-9	LR	21632	39
278	Manganese(II) Chloride Tetrahydrate	13446-34-9	AR	31633	39
279	Manganese(II) Chloride Tetrahydrate	13446-34-9	ACS	41634	39
280	Manganese(II) Fluoride Anhydrous	7782-64-1	PURE	116371	39
281	Manganese(II) Iodide Anhydrous	7790-33-2	PURE	116731	39
282	Manganese(II) Iodide Tetrahydrate	13446-37-2	PURE	11673	39
283	Manganese(II) Oxalate Dihydrate	6556-16-7	LR	21672	40
284	Manganese(IV) Oxide (Manganese Dioxide)	1313-13-9	AR	31608	40
285	Manganese(IV) Oxide 90% , 10 Micron (Manganese Dioxide)	1313-13-9	ULTRA PURE	51609	40
286	Manganese(IV) Oxide 99% (Manganese Dioxide)	1313-13-9	LR	21608	40
287	Manganese(II, III) Oxide (Manganese Tetroxide)	1317-34-6	AR	316081	40
288	Manganese(II) Perchlorate Hexahydrate	15364-94-1	PURE	31645	40
289	Manganese(II) Phosphate Heptahydrate	10236-39-2	LR	11626	40
290	Manganese(II) Phosphate Trihydrate	39041-31-1	LR	21627	40
291	Manganese(II) Sulphate Monohydrate	10034-96-5	LR	21682	41
292	Manganese(II) Sulphate Monohydrate	10034-96-5	AR	31683	41
293	Manganese(II) Sulphate Monohydrate	10034-96-5	ACS	41684	41
294	Ammoniated Mercury Chloride	10124-48-8	PURE	2112432	42
295	Mercuric Acetate	1600-27-7	LR	22462	42
296	Mercuric Acetate	1600-27-7	AR	32463	42
297	Mercuric Bromide	7789-47-1	LR	22412	42
298	Mercuric Bromide	7789-47-1	AR	32413	42
299	Mercuric Chloride	7487-94-7	LR	22432	42
300	Mercuric Chloride	7787-94-7	AR	32433	43
301	Mercuric Iodide	7774-29-0	LR	22473	43

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303	Mercuric Nitrate	10045-94-0	LR	22452	43
304	Mercuric Nitrate	10045-94-0	AR	32453	43
305	Mercuric Oxide Red	21908-53-2	LR	22407R	43
306	Mercuric Oxide Red	21908-53-2	AR	32408R	43
307	Mercuric Oxide Yellow	21908-53-2	LR	22407Y	44
308	Mercuric Oxide Yellow	21908-53-2	AR	32408Y	44
309	Mercuric Sulphate	7783-35-9	LR	22482	44
310	Mercuric Sulphate	7783-35-9	AR	32483	44
311	Nickel(II) Acetate Anhydrous	373-02-4	PURE	108611	45
312	Nickel(II) Acetate Tetrahydrate	6018-89-9	LR	20862	45
313	Nickel(II) Borate Hydrate	51142-85-9	PURE	10817	45
314	Nickel(II) Bromide Anhydrous	13462-88-9	PURE	108111	45
315	Nickel(II) Bromide Anhydrous	13462-88-9	AR	308131	45
316	Nickel(II) Carbonate Anhydrous	3333-67-3	LR	208421	45
317	Nickel(II) Hydroxide Carbonate	39380-74-0 /	LR	20842	45
	(Nickel(II) Carbonate Basic Hydrate)	12607-70-4 / 39430-27-8			
318	Nickel(II) Hydroxide Carbonate, (Low Cobalt)	39380-74-0 / 12607-70-4 /	AR	30843	45
	(Nickel(II) Carbonate Basic Hydrate)	39430-27-8			
319	Nickel(II) Chloride Anhydrous	7718-54-9	PURE	108311	45
320	Nickel(II) Chloride Anhydrous	7718-54-9	ULTRA PURE	508351	46
321	Nickel(II) Chloride Hexahydrate	7791-20-0	LR	20832	46
322	Nickel(II) Chloride Hexahydrate	7791-20-0	AR	30833	46
323	Nickel(II) Chloride Hexahydrate	7791-20-0	ACS	40834	46
324	Nickel Chromite	12018-18-7	PURE	108231	46
325	Nickel(II) Citrate	6018-92-4	PURE	10868	46
326	Nickel(II) Fluoride Tetra Hydrate	13940-83-5	LR	20838	46
327	Nickel(II) Hydroxide	12054-48-7	LR	20848	46
328	Nickel(II) Iodide Anhydrous	13462-90-3	PURE	108731	47
329	Nickel(II) Iodide Hydrate	7790-34-3	PURE	10873	47
330	Nickel(II) Nitrate Hexahydrate	13478-00-7	LR	20852	47
331	Nickel(II) Nitrate Hexahydrate	13478-00-7	AR	30853	47
332	Nickel(II) Nitrate Hexahydrate	13478-00-7	ACS	40854	47
333	Nickel(II) Oxalate Dihydrate	6018-94-6	LR	20872	47
334	Nickel(II) Oxide Black	1314-06-3	LR	20808	47
335	Nickel(II) Oxide Black	1314-06-3	AR	30809	48
336	Nickel(II) Oxide Green	1313-99-1	LR	20808G	48
337	Nickel(II) Perchloride Hexahydrate	13520-61-1	PURE	10845	48
338	Nickel(II) Perchloride Hexahydrate	13520-61-1	AR	30845	48
339	Nickel(II) Phosphate Hydrate	27176-17-6	PURE	10826	48
340	Nickel(II) Sulpha Mate Tetra Hydrate	124594-15-6	LR	20888	48
341	Nickel(II) Sulphate Anhydrous	7786-81-4	LR	208821	48
342	Nickel(II) Sulphate Heptahydrate	10101-97-0	LR	20882	48
343	Nickel(II) Sulphate Heptahydrate	10101-97-0	AR	30883	49
344	Nickel(II) Sulphate Hexahydrate	10101-97-0	ACS	40884	49
345	Strontium Acetate Anhydrous	543-94-2	LR	205621	50
346	Strontium Acetate Hemihydrate	14692-29-6	LR	20562	50
347	Strontium Bromide Anhydrous	10476-81-0	PURE	105111	50
348	Strontium Bromide Hexahydrate	7789-53-9	LR	20512	50
349	Strontium Bromide Hexahydrate	7789-53-9	AR	30513	50
350	Strontium Bromide Hexahydrate	7789-53-9	ACS	40514	50
351	Strontium Carbonate	1633-05-2	LR	20542	50
352	Strontium Carbonate	1633-05-2	AR	30543	50
353	Strontium Chloride Anhydrous	10476-85-4	LR	205311	50
354	Strontium Chloride Hexahydrate	10025-70-4	LR	20532	51
355	Strontium Chloride Hexahydrate	10025-70-4	AR	30533	51
356	Strontium Chloride Hexahydrate	10025-70-4	ACS	40534	51
357	Strontium Chromate	7789-06-2	LR	20522	51
358	Strontium Citrate Dibasic Anhydrous	813-97-8	LR	20568	51

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359	Strontium Fluoride	7783-48-4	PURE	10537	51
360	Strontium Fluoride	7783-48-4	LR	20538	51
361	Strontium Iodide Anhydrous	10476-86-5	LR	205741	51
362	Strontium Iodide Hexahydrate	7790-40-1	LR	20574	52
363	Strontium Nitrate Anhydrous	10042-76-9	LR	20552	52
364	Strontium Nitrate Anhydrous	10042-76-9	AR	30553	52
365	Strontium Nitrate	10042-76-9	ACS	40534	52
366	Strontium Oxalate Monohydrate	6160-36-7	PURE	10571	52
367	Strontium Perchlorate Hexahydrate	13450-97-0	LR	20545	52
368	Strontium Perchlorate Trihydrate	15650-09-6	LR	20545	52
369	Strontium Sulphate	7759-02-6	LR	20582	52
370	Tin(II) Chloride Dihydrate (Stannous Chloride Dihydrate)	10025-69-1	LR	20732	53
371	Tin(II) Chloride Dihydrate (Stannous Chloride Dihydrate)	10025-69-1	AR	30733	53
372	Tin(II) Chloride Dihydrate	10025-69-1	ACS	40734	53
373	Tin(II) Chloride Dihydrate (Stannous Chloride Dihydrate)	10025-69-1	ACS	40734	53
374	Tin(IV) Chloride Pentahydrate (Stannic Chloride Pentahydrate)	10026-06-9	LR	20732(IV)	53
375	Tin(II) Sulphate (Stannous Sulfate)	7488-55-3	PURE	10781	53
376	Zinc Acetate Anhydrous	557-34-6	LR	220621	54
377	Zinc Acetate Dihydrate	5970-45-6	LR	22062	54
378	Zinc Acetate Dihydrate	5970-45-6	AR	32063	54
379	Zinc Acetate Dihydrate	5970-45-6	ACS	42064	54
380	Zinc Bromide Anhydrous	7699-45-8	LR	22012	54
381	Zinc Bromide Anhydrous	7699-45-8	AR	32013	54
382	Zinc Bromide Anhydrous	7699-45-8	ULTRA PURE	52015	54
383	Zinc Carbonate Basic (Zinc Carbonate Hydroxide)	12539-71-8 / 5263-02-5	LR	22042	55
384	Zinc Citrate Dihydrate	5990-32-9	LR	22069	55
385	Zinc Citrate Trihydrate	546-46-3	LR	22069	55
386	Zinc Fluoride Anhydrous	7783-49-5	LR	220381	55
387	Zinc Iodide Anhydrous	10139-47-6	LR	22072	55
388	Zinc Iodide Anhydrous	10139-47-6	AR	32073	55
389	Zinc Iodide Anhydrous	10139-47-6	ULTRA PURE	52075	55
390	Zinc Nitrate Hexahydrate	10196-18-6	LR	22052	55
391	Zinc Nitrate Hexahydrate	10196-18-6	AR	32053	56
392	Zinc Nitrate Hexahydrate	10196-18-6	ACS	42054	56
393	Zinc Phosphate Hydrate	7543-51-3	PURE	12026	56
394	Zinc Perchlorate Hexahydrate	10025-64-6	LR	32045	56
395	Zinc Perchlorate Hexahydrate	10025-64-6	AR	32045	56
M01	Antimony Powder	7440-36-0	LR	22102	57
M02	Bismuth Metal Granular	7440-69-9	LR	20102	57
M03	Chromium Metal Powder	7440-47-3	LR	21902	57
M04	Cobalt Metal Powder	7440-48-4	AR	30303	57
M05	Copper Powder Electrolytic 99.5 %	7440-50-8	ULTRA PURE	50305	57
M06	Copper Powder	7440-50-8	LR	20302	57
M07	Iron Powder	7439-89-6	LR	22702	57
M08	Magnesium Powder	7439-95-4	AR	30803	57
M09	Manganese Powder	7439-96-5	LR	21601	58
M10	Molybdenum Powder	7439-96-5	LR	22502	58
M11	Nickel Powder	7440-02-0	LR	20802	58
M12	Silver Powder	7440-22-4	LR	21702	58
M13	Tin Powder	7440-31-5	LR	20702	58
M14	Tin Granular	7440-31-5	LR	20702G	58
M15	Titanium Powder	7440-32-6	AR	32603	58
M16	Tungsten Powder	7440-33-7	LR	22802	58
M17	Zinc Powder	7440-66-6	LR	22002	58

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FOR QUALITY SINCE 1968**

PRODUCT
SPECIFICATIONS

AMMONIUM

Symbol - NH₄

At.Wt. 18.04, CAS No. 14798-03-9

AMMONIUM BROMIDE

Grade: LR

Product No: 21111

M.F.	NH ₄ Br
M.W.	97.95
Description	White Crystal / Crystalline Powder
Assay (ex Br)	99.0 % Min.
Non Volatile matter	0.05 % Max.
Chloride (Cl)	0.5 % Max.
Sulfate (SO ₄)	0.005 % Max.
Iron (Fe)	0.001 % Max.
Heavy Metals (as Pb)	0.001 % Max.



Irritant

CAS No. 12124-97-9

Tariff No. 28275990

NON DG

AMMONIUM BROMIDE

Grade: AR

Product No: 31112

M.F.	NH ₄ Br
M.W.	97.95
Description	White Crystal / Crystalline Powder
Min Assay	99.8 %
Bromate (BrO ₃)	0.01 % Max.
Chloride (Cl)	0.2 % Max.
Iodide (I)	0.02 % Max.
Sulfate (SO ₄)	0.005 % Max.
Arsenic (As)	0.0002 % Max.
Barium (Ba)	0.005 % Max.
Heavy Metals (as Pb)	0.001 % Max.
Iron (Fe)	0.001 % Max.
Loss on drying at 100 C	0.1 % Max.
Ignition Residue (as SO ₄)	0.05 % Max.



Irritant

CAS No. 12124-97-9

Tariff No. 28275990

NON DG

AMMONIUM BROMIDE

Grade: ACS

Product No: 41113

M.F.	NH ₄ Br
M.W.	97.95
Description	White Crystal / Crystalline Powder
Min Assay	99 %
5% pH	4.5 – 6.0
Insoluble matter	0.005 % Max.
Ignition Residue	0.01 % Max.
Barium	0.002 % Max.
Bromate	0.002 % Max.
Chloride	0.2 % Max.
Iron	0.0005 % Max.
Iodide	Passes Test.
Heavy Metals(By ICP-OES)	0.0005 % Max.
Sulfate	0.005 % Max.



Irritant

CAS No. 12124-97-9

Tariff No. 28275990

NON DG

AMMONIUM CARBONATE

Grade: LR

Product No: 21142

M.F.	(NH ₄) ₂ CO ₃
M.W.	96.09
Description	White crystalline Powder
Ammonia (NH ₃)	30.0 % Min.
Chloride (Cl)	0.002 % Max.
Sulfate (SO ₄)	0.005 % Max.
Iron (Fe)	0.0005 % Max.
Lead (Pb)	0.002 % Max.
Potassium (K)	0.002 % Max.
Sodium (Na)	0.005 % Max.



Irritant

CAS No. 506-87-6

Tariff No.2836990

NON DG

AMMONIUM CHLORIDE

Grade: LR

Product No: 21132

M.F.	NH ₄ Cl
M.W.	53.49
Description	White Crystal / Crystalline Powder
Assay (ex Cl)	99.0 % Min.
Sulfate (SO ₄)	0.015 % Max.
Heavy Metals (as a Pb)	0.001 % Max.
Arsenic (As)	0.0003 % Max.
Lead (Pb)	0.001 % Max.
Calcium (Ca)	0.02 % Max.
Iron (Fe)	0.002 % Max.
Copper (Cu)	0.0025 % Max.
Zinc (Zn)	0.0025% Max.
Residue on Ignition	0.1 % Max.
Iodide,Bromide (I,Br)	Passes Test



Irritant

CAS No.12125-02-9

Tariff No.28271000

NON DG

AMMONIUM CHLORIDE

Grade: ACS

Product No: 41134

M.F.	NH ₄ Cl
M.W.	53.49
Description	A white crystalline Powder
5 % pH	4.5 – 5.5
Assay (ex Cl)	99.5 % Min.
Insoluble Matter	0.005 % Max.
Residue on Ignition (Ash)	0.01 % Max.
Calcium (Ca)	0.001 % Max.
Magnesium (Mg)	5 ppm Max.
Heavy Metal (By ICP-OES)	5 ppm Max.
Iron (Fe)	2 ppm Max.
Phosphate	2 ppm Max.
Sulfate (SO ₄)	0.002 % Max.



Irritant

CAS No.12125-02-9

Tariff No.28271000

NON DG

Notes

AMMONIUM IODIDE

Grade: LR

Product No: 21174

M.F.	NH ₄ I
M.W.	144.94
Description	White crystalline powder which may become pale yellow on storage
Assay (Argentometry)	98.5 % Min.
Residue on Ignition	0.05 % Max.
Heavy Metals (as Pb)	0.001 % Max.



Irritant

CAS No. 12027-06-4

Tariff No. 28276090

NON DG

AMMONIUM IODIDE

Grade: AR

Product No: 31174

M.F.	NH ₄ I
M.W.	144.94
Description	White crystalline powder which may become pale yellow on storage.
5 % pH	4.5 – 6.5
Assay (ex NH ₃)	99.5 % Min.
Water Insoluble matter	0.005 % Max.
Non Volatile matter	0.02 % Max.
Chloride & Bromide	0.005 % Max.
Iodate (IO ₃)	0.0005 % Max.
Phosphate (PO ₄)	0.002 % Max.
Barium (Ba)	0.002 % Max.
Sulfate (SO ₄)	0.005 % Max.
Calcium (Ca)	0.01 % Max.
Copper (Cu)	0.0001 % Max.
Iron (Fe)	0.0002 % Max.
Lead (Pb)	0.0002 % Max.
Potassium (K)	0.002 % Max.
Sodium (Na)	0.002 % Max.
LOD at 105° C	0.05 % Max.



Irritant

CAS No. 12027-06-4

Tariff No. 28276090

NON DG

AMMONIUM IODIDE

Grade: ACS

Product No: 41175

M.F.	NH ₄ I
M.W.	144.94
Description	White crystalline powder which may become pale yellow on storage
Assay	99.0 % NH ₄ I
Water Insoluble matter	0.005 % Min.
Residue after ignition	0.05 Min.
Chloride & Bromide (As Cl)	0.005 % Max.
Phosphate (PO ₄)	0.001 % Max.
Barium (Ba)	0.002 % Max.
Sulfate (SO ₄)	0.05 % Max.
Iron (Fe)	0.0005 % Max.



Irritant

CAS No. 7787-32-8

Tariff No. 28261990

NON DG

AMMONIUM MOLYBDATE TETRAHYDRATE

Grade: LR

Product No: 21196

M.F.	(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O
M.W.	1235.90
Description	White to off-white Crystal or crystalline powder.
Assay (ex Mo)	99.0 % Min.
Chloride (Cl)	0.002 % Max.
Sulfate (SO ₄)	0.02 % Max.
Lead (Pb)	0.002 % Max.
Iron (Fe)	0.005 % Max.



Irritant

CAS No. 12054-85-2

Tariff No. 28417090

NON DG

AMMONIUM MOLYBDATE TETRAHYDRATE

Grade: ACS

Product No: 41196

M.F.	(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O
M.W.	1235.90
Description	White to off-white Crystal or crystalline powder.
Assay (ex MoO ₃)	81.0 – 83 % Min.
Insoluble matter	0.005 %
Nitrate(NO ₃)	Passes Test
Chloride (Cl)	0.002 % Max.
Arsenate,phosphate,silicate (SiO ₂)	0.001 %
Sulfate (SO ₄)	0.02 % Max.
Heavy metals(By ICP-OES)	0.002 % Max.
Magnesium(Mg)	0.005 %
Potassium (K)	0.01 %
Sodium(Na)	0.01 %

CAS NO. 12054-85-2

Tariff No. 28417090

NON DG

AMMONIUM SULFATE

Grade: LR

Product No: 21182

M.F.	(NH ₄) ₂ SO ₄
M.W.	132.13
Description	A White Crystal / Crystalline Powder.
10 % Solution pH	Not Less than 4.5
Assay	98.5 % Min.
Non-Volatile Matter	0.2 % Max.
Chloride (Cl)	0.005 % Max.
Iron (Fe)	0.002 % Max.
Lead (Pb)	0.002 % Max.

CAS No. 7783-20-2

Tariff No. 31022100

NON DG

AMMONIUM SULFATE

Grade: AR

Product No: 31183

M.F.	(NH ₄) ₂ SO ₄
M.W.	132.13
Description	A White Crystal / Crystalline Powder
5% Solution pH	5.0 – 6.0
Purity	99.5 % Min.
Water-insoluble matter	0.001 % Max.
Loss on drying	0.1 % Max.
Chloride (Cl)	0.0003 % Max.
Phosphate (PO ₄)	0.001 % Max.
Calcium (Ca)	0.001 % Max.
Copper (Cu)	0.0001 % Max.
Iron (Fe)	0.0001 % Max.
Lead (Pb)	0.0002 % Max.
Magnesium (Mg)	0.0002 % Max.
Potassium (K)	0.002 % Max.
Sodium (Na)	0.002 % Max.

CAS No. 7783-20-2

Tariff No. 31022100

NON DG

AMMONIUM SULFATE

Grade: ACS

Product No: 41184

M.F.	(NH ₄) ₂ SO ₄
M.W.	132.13
Description	A White Crystal / Crystalline Powder
5% Solution pH	5.0 – 6.0
Assay	99 % Min.
Insoluble Matter	0.05 % Max.
Chloride (Cl)	0.0005 % Max.
Nitrate(NO ₃)	0.001 %
Phosphate(PO ₄)	0.0005 %
Iron (Fe)	0.0005 % Max.
Heavy metals(By ICP-OES)	0.0005 % Max.

CAS No. 7783-20-2

Tariff No. 31022100

NON DG

BARIUM

Symbol - Ba

At.No. 56, At.Wt. 137.33, CAS No. 7440-39-3

BARIUM ACETATE

Grade: LR

Product No: 21262

M.F.	Ba(CH ₃ COO) ₂
M.W.	255.43
Description	White Crystal/Crystalline Powder
Assay (ex Ba)	99.0% Min.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.005% Max.
Sodium (Na)	0.025% Max.
Potassium (K)	0.01% Max.



Irritant

CAS No. 543-80-6

Tariff No. 29152990

NON DG

BARIUM ACETATE

Grade: AR

Product No: 31263

M.F.	Ba(CH ₃ COO) ₂
M.W.	255.43
Description	White Crystal/Crystalline Powder
Assay (ex Ba)	99.0% Min.
pH 5% Solution	7.0 - 8.5
Chloride (Cl)	0.0005% Max.
Nitrate (NO ₃)	0.005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0005% Max.
Strontium (Sr)	0.15% Max.
Sodium (Na)	0.005% Max.
Sulphate (SO ₄)	0.1% Max.
Potassium (K)	0.003% Max.
Water Insoluble Matter	0.003% Max.



Irritant

CAS No. 543-80-6

Tariff No. 29152990

NON DG

BARIUM ACETATE

Grade: ACS

Product No: 41264

M.F.	Ba(CH ₃ COO) ₂
M.W.	255.43
Description	White Crystal/Crystalline Powder
Assay	99.0% - 102.0%
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.001% Max.
Oxidizing Substances (as a NO ₃)	0.005% Max.
Calcium (Ca)	0.05% Max.
Potassium (K)	0.003% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.2% Max.
Heavy Metals (as Pb)	5ppm Max.
Iron (Fe)	0.001% Max.



Irritant

CAS No. 543-80-6

Tariff No. 29152990

NON DG

BARIUM BROMIDE ANHYDROUS

Grade: PURE

Product No: 112111

M.F.	BaBr ₂
M.W.	297.16
Description	White Crystalline Powder
Assay (ex Br)	99.0% Min.
Loss of Drying (100°C, 1hr)	1.0% Max.



Irritant

CAS No. 10553-31-8

Tariff No. 28275990

UN No. 1564

Class 6.1

PG II

BARIUM BROMIDE DIHYDRATE

Grade: LR

Product No: 21212

M.F.	BaBr ₂ ·2H ₂ O
M.W.	333.19
Description	Colourless Crystal/Crystalline Powder
pH 10% Solution	5.0 - 7.0
Assay (ex Br)	98.0% Min.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.002% Max.



Irritant

CAS No. 7791-28-8

Tariff No. 28275990

UN No. 1564

Class 6.1

PG III

BARIUM CARBONATE

Grade: LR

Product No: 21242

M.F.	BaCO ₃
M.W.	197.35
Description	White Powder
Assay (Acidimetric)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulphide (S)	0.05% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.002% Max.



Irritant

CAS No. 513-77-9

Tariff No. 28366000

NON DG

BARIUM CARBONATE

Grade: AR

Product No: 31243

M.F.	BaCO ₃
M.W.	197.35
Description	White Powder
Assay (Acidimetric)	99.0% Min.
Chloride (Cl)	0.002% Max.
Sulphide (S)	0.001% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.001% Max.
Calcium (Ca)	0.05% Max.
Copper (Cu)	0.001% Max.
Strontium (Sr)	0.3% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.02% Max.
HCl Insoluble Matter	0.015% Max.
Soluble Alkali	0.015% Max.



Irritant

CAS No. 513-77-9

Tariff No. 28366000

NON DG

Notes

BARIUM CARBONATE

Grade: ACS

Product No: 41244

M.F.	BaCO ₃
M.W.	197.34
Description	White Powder
Min Assay	99.0% - 101.0%
Insoluble in Dilute Hydrochloric Acid	0.015% Max.
Chloride (Cl)	0.002% Max.
Water-Soluble Titrable Base	0.002 meq/g
Oxidizing Substances (as a NO ₃)	0.005% Max.
Sulfide (S)	0.001% Max.
Calcium (Ca)	0.05% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.02% Max.
Strontium (Sr)	0.7% Max.
Heavy Metals (as Pb)	0.001% Max.
Iron (Fe)	0.002% Max.



Irritant

CAS No. 513-77-9

Tariff No. 28366000

NON DG

BARIUM CHROMATE

Grade: LR

Product No: 21522

M.F.	BaCrO ₄
M.W.	253.32
Description	Yellow Powder
Assay (Iodometric)	98.0% Min.
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.05% Max.
-100 Mesh	100% Pass



Irritant



Oxidizing

CAS No. 10294-40-3

Tariff No. 28415090

UN No. 1479

Class 5.1

PG II

BARIUM FLUORIDE

Grade: LR

Product No: 21238

M.F.	BaF ₂
M.W.	175.34
Description	A White Powder
Assay (ex Ba)	98.0% Min.
Acidity	20 ml N %
Chloride	0.005% Max.
Silica (SiO ₂)	1% Max.
-100 mesh	100% Pass



Irritant

CAS No. 7787-32-8

Tariff No. 28261990

UN No. 1564

Class 6.1

PG III

BARIUM IODIDE ANHYDROUS

Grade: PURE

Product No: 112731

M.F.	BaI ₂
M.W.	391.15
Description	Crystalline Powder White to Yellowish White
Assay (Metal Basis)	98.0% Min.
Loss on Drying	5.0% Max.



Irritant

CAS No. 13718-50-8

Tariff No. 28276090

UN No. 1564

Class 6.1

PG III

BARIUM IODIDE DIHYDRATE

Grade: LR

Product No: 21273

M.F.	BaI ₂ .2H ₂ O
M.W.	427.17
Description	White to Off White Crystalline Powder.
Assay (ex I)	98.0% Min.
Strontium (Sr)	1.0% Max.
Iron (Fe)	0.05% Max.



Irritant

Lead (Pb)

0.01% Max.

CAS No. 7787-33-9

Tariff No. 28276090

UN No. 1564

Class 6.1

PG III

BARIUM IODIDE DIHYDRATE

Grade: AR

Product No: 21274

M.F.	BaI ₂ .2H ₂ O
M.W.	427.17
Description	White to Off White Crystalline Powder
Assay (ex I)	99.0% Min.
Strontium Iodate (SrI ₂)	1.0% Max.
Silver (Ag)	0.001% Max.
Sodium (Na)	0.002% Max.
Potassium (K)	0.002% Max.
Lithium (Li)	0.002% Max.
Iron (Fe)	0.002% Max.
Copper (Cu)	0.002% Max.
Magnesium (Mg)	0.01% Max.
Calcium (Ca)	0.01% Max.
Sulfide (S)	0.01% Max.



Irritant

CAS NO. 7787-33-9

Tariff No. 28276090

UN No. 1564

Class 6.1

PG III

BARIUM BORATE

Grade: PURE

Product No: 11216

(Barium Metaborate)

M.F.	BaB ₂ O ₄ .H ₂ O
M.W.	240.97
Description	White Powder
Assay (ex Ba)	99.0% Min.



Irritant

CAS No. 26124-86-7

Tariff No. 28276090

NON DG

BARIUM NITRATE

Grade: LR

Product No: 31252

M.F.	Ba(NO ₃) ₂
M.W.	261.34
Description	White Crystalline
Assay	99% Min.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.01% Max.
Potassium (K)	0.025% Max.
Sodium (Na)	0.05% Max.



Irritant



Oxidizing

CAS No. 10022-31-8

Tariff No. 28342930

UN No. 1446

Class (5.1)6.1

PG II

BARIUM NITRATE

Grade: AR

Product No: 31253

M.F.	Ba(NO ₃) ₂
M.W.	261.34
Description	White Crystalline
pH 5% Solution	5.0 - 8.0
Assay (Acidimetric)	99.5% Min.
Insoluble Matter	0.0005% Max.
Chloride (Cl)	0.0005% Max.
Calcium (Ca)	0.002% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0002% Max.
Lead (Pb)	0.0005% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.05% Max.



Irritant



Oxidizing

CAS No. 10022-31-8

Tariff No. 28342930

UN No. 1446

Class (5.1)6.1

PG II

BARIUM NITRATE

Grade: ACS

Product No: 41254

M.F.	Ba(NO ₃) ₂
M.W.	261.35
Description	Colourless/White Crystals or Crystalline powder
pH 5% Solution at 25°C	5.0 - 8.0
Assay	99.0% Min.
Insoluble Matter	0.01% Min.
Chloride (Cl)	5ppm Max.
Calcium (Ca)	0.05% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.1% Max.
Heavy Metals (by ICP-OES)	5ppm Max
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	2ppm Max.



Irritant



Oxidizing

CAS No. 10022-31-8

Tariff No. 28342930

UN No. 1446

Class 5.1(6.1)

PG II

BARIUM PERCHLORATE ANHYDROUS

Grade: PURE

Product No: 112451

M.F.	Ba(ClO ₄) ₂
M.W.	336.24
Description	White/Off White Powder
Assay (ex Ba)	97.0% Min.



Irritant



Oxidizing

CAS No. 13465-95-7

Tariff No. 28291990

UN No. 1447

Class 5.1(6.1)

PG II

BARIUM PERCHLORATE ANHYDROUS

Grade: LR

Product No: 212451

M.F.	Ba(ClO ₄) ₂
M.W.	336.24
Description	A White/Off White Powder
Assay (ex Ba)	98.0% Min.
Chloride (Cl)	0.001% Max.
Calcium (Ca)	0.05% Max.
Heavy Metals (as a Pb)	0.005% Max.
Water (Kf)	4.0% Max.



Irritant



Oxidizing

CAS No. 13465-95-7

Tariff No. 2829 19 90

UN No. 1447

Class 5.1(6.1)

PG II

BARIUM PERCHLORATE TRIHYDRATE

Grade: LR

Product No: 22145

M.F.	Ba(ClO ₄) ₂ ·3H ₂ O
M.W.	390.28
Description	A White/Off White Crystals
Assay (ex Ba)	98.0% Min.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.002% Max.



Irritant



Oxidizing

CAS No. 10294-39-0

Tariff No. 28291990

UN No. 1447

Class 5.1(6.1)

PG II

BARIUM PERCHLORATE TRIHYDRATE

Grade: AR

Product No: 31246

M.F.	Ba(ClO ₄) ₂ ·3H ₂ O
M.W.	390.29
Description	White Crystalline
Assay (ex Ba)	99.0% Min.
Insoluble Matter	0.005% Max.
Sulfate (SO ₄)	0.001% Max.
Lead (Pb)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Chloride and Chlorate	0.003% Max.



Irritant



Oxidizing

CAS No. 10294-39-0

Tariff No. 28291990

UN No. 1447

Class 5.1(6.1)

PG II

BARIUM SULPHATE

Grade: AR

Product No: 31283

M.F.	BaSO ₄
M.W.	233.39
Description	White Powder
Assay (ex Ba)	97.0% Min.
Chloride (Cl)	0.001% Max.
Free Acid (H ₂ SO ₄)	0.02% Max.
Phosphate (PO ₄)	0.001% Max.
Heavy Metals (as Pb)	0.001% Max.
Arsenic (As)	0.0001% Max.
Loss On Ignition	2.0% Max.



No GHS

CAS No. 7727-43-7

Tariff No. 28332700

NON DG

BARIUM THIOSULPHATE

Grade: LR

Product No: 21293

M.F.	BaS ₂ O ₃
M.W.	249.46
Description	White Powder
Assay (ex Ba)	98.0% Min.
Sulfate (SO ₄)	1.0% Max.



Irritant

CAS No. 35112-53-9

Tariff No. 28323090

UN No. 1564

Class 6.1

PG III

BARIUM THIOSULPHATE

Grade: AR

Product No: 31293

M.F.	BaS ₂ O ₃
M.W.	249.46
Description	White Powder
Assay (ex Ba)	99.0% Min.
Sulfate (SO ₄)	0.05% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.001% Max.
Sodium (Na)	0.1% Max.



Irritant

CAS No. 35112-53-9

Tariff No. 28323090

UN No. 1564

Class 6.1

PG III

BISMUTH

At.No. 83, At.Wt. 208.98, CAS No. 7440-69-9

Symbol - Bi

BISMUTH(III) ACETATE

Grade: PURE

(Bismuth Tri Acetate)

Product No: 10161

M.F.	Bi(CH ₃ COO) ₃
M.W.	386.12
Description	White Crystal
Assay (ex Bi)	95.0% Min.



No GHS

CAS No. 22306-37-2**Tariff No. 29152990****NON DG****BISMUTH(III) BROMIDE**

Grade: LR

(Bismuth Tri Bromide)

Product No: 20112

M.F.	BiBr ₃
M.W.	448.71
Description	Yellow, Crystalline Powder
Assay (ex Bi)	98.0% Min.



Corrosive

CAS No. 7787-58-8**Tariff No. 28275990****UN No. 3260****Class 8****PG II****BISMUTH(III) BORATE**

Grade: AR

Product No: 30119

M.F.	BiBO ₃
M.W.	267.79
Description	A White Powder
Assay (Metal Base)	99.0% Min.
Sulphate (SO ₄)	0.01% Max.
Aluminum (Al)	0.04% Max.
Calcium (Ca)	0.01% Max.
Arsenic (As)	0.0005 Max.
Iron (Fe)	0.03% Max.
Heavy Metals (as a Pb)	0.002% Max.



No GHS

CAS No. 37233-77-5**Tariff No. 28408090****NON DG****BISMUTH(III) CARBONATE**

Grade: LR

Product No: 20142

Description	White Fine Powder
Assay (as a Bi)	81.0% Min.
Loss on drying	0.5% Max.
Chloride (Cl)	0.02% Max.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.05% Max.



Irritant

CAS No. 513-77-9**Tariff No. 28369990****NON DG****BISMUTH(III) CARBONATE HYDRATE BASIC**

Grade: LR

Product No: 50142

M.F.	(BiO) ₂ CO ₃
M.W.	509.97
Description	A White Powder
Assay (as a Bi ₂ O ₃)	90.0% - 92.0%
Assay (as a Bi)	80.0% - 82.0%



Irritant

CAS No. 5892-10-4**Tariff No. 28369990****NON DG****BISMUTH(III) CHLORIDE**

Grade: PURE

(Bismuth Tri Chloride)

Product No: 10131

M.F.	BiCl ₃
M.W.	315.34
Description	White to Off White, very Deliquescent Crystals
Assay (ex Bi)	92.0% Min.



Irritant

CAS No. 7787-60-2**Tariff No. 28273990****NON DG****BISMUTH(III) CHLORIDE**

Grade: LR

(Bismuth Tri Chloride)

Product No: 20132

M.F.	BiCl ₃
M.W.	315.34
Description	White to Off White, very Deliquescent Crystals
Assay (ex Bi)	97.0% Min.
Sulphate (SO ₄)	0.05% Max.
Cadmium (Cd)	0.005% Max.
Copper (Cu)	0.005% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.005% Max.
Loss on drying (110°C)	3.0% Max.



Irritant

CAS No. 7787-60-2**Tariff No. 28273990****NON DG****BISMUTH(III) CHLORIDE**

Grade: AR

(Bismuth Tri chloride)

Product No: 30133

M.F.	BiCl ₃
M.W.	315.34
Description	White to Off White, very Deliquescent Crystals
Assay (ex Bi)	99.0% Min.
Sulphate (SO ₄)	0.002% Max.
Arsenic (As)	0.0001% Max.
Iron (Fe)	0.001% Max.
Loss on drying	1.0% Max.



Irritant

CAS No. 7787-60-2**Tariff No. 28273990****NON DG****BISMUTH(III) CHLORIDE**

Grade: ACS

(Bismuth Tri chloride)

Product No: 30133

M.F.	BiCl ₃
M.W.	315.34
Description	White to Off White, very Deliquescent Crystals
Assay (as a BiCl ₃)	98.0% - 102.0%
Insoluble matter	0.01% Max.
Nitrate (NO ₃)	0.01% Max.
Sulphate (SO ₄)	0.01% Max.
Arsenic (As)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.
Silver (Ag)	0.002% Max.



Irritant

CAS No. 7787-60-2**Tariff No. 28273990****NON DG**

BISMUTH(III) HYDROXIDE

Grade: PURE

Product No: 10148

M.F.	Bi(OH) ₃
M.W.	260.00
Description	White Powder.
Assay (ex Bi)	99.0% Min.



CAS No. 10361-43-0
Tariff No. 28259090

NON DG**BISMUTH(III) IODIDE**

Grade: LR

Product No: 10173

M.F.	BiI ₃
M.W.	589.69
Description	Grey to Black Powder
Assay (as a Bi, Complexometric)	34.0% - 36.0%



CAS No. 7787-64-6
Tariff No. 28276090

NON DG**BISMUTH(III) NITRATE PENTAHYDRATE**

Grade: LR

Product No: 20152

M.F.	Bi(NO ₃) ₃ ·5H ₂ O
M.W.	485.07
Description	White Crystal
Assay	98.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.02% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.02% Max.



CAS No. 10035-06-0
Tariff No. 28342990

UN No. 1477**Class 5.1****PG II****BISMUTH(III) NITRATE PENTAHYDRATE**

Grade: AR

Product No: 30153

M.F.	Bi(NO ₃) ₃ ·5H ₂ O
M.W.	485.07
Description	White Crystal
Assay	99.0% Min.
Insoluble Matter (Dil. Nitric Acid)	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO ₄)	0.02% Max.
Calcium (Ca)	0.001% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.002% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.002% Max.
Silver (Ag)	0.001% Max.
Zinc (Zn)	0.001% Max.



CAS No. 10035-06-0
Tariff No. 28342990

UN No. 1477**Class 5.1****PG II****BISMUTH(III) NITRATE PENTAHYDRATE**

Grade: ACS

Product No: 40154

M.F.	Bi(NO ₃) ₃ ·5H ₂ O
M.W.	485.07
Description	White Crystal
Assay	98.0% Min.
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO ₄)	0.005% Max.
Arsenic (As)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.



Iron (Fe)	0.001% Max.
Lead (Pb)	0.002% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.
Silver (Ag)	0.001% Max.

CAS No. 10035-06-0
Tariff No. 28342990

UN No. 1477**Class 5.1****PG II****BISMUTH(III) OXIDE**

Grade: LR

(Bismuth Tri Oxide)

Product No: 20107

M.F.	Bi ₂ O ₃
M.W.	465.96
Description	Heavy, Yellow Powder
Assay (ex Bi)	99.0% Min.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.01% Max.
Arsenic (As)	0.001% Max.



CAS No. 1304-76-3
Tariff No. 28259090

NON DG**BISMUTH OXY CHLORIDE**

Grade: LR

(Bismuth Sub Chloride)

Product No: 50132

M.F.	BiOCl
M.W.	260.43
Description	White to Off White Powder
Assay (as a Bi)	79.0% - 81.0%



CAS No. 7787-59-9
Tariff No. 28273990

NON DG**BISMUTH OXY FLUORIDE**

Grade: LR

(Bismuth Sub Fluoride)

Product No: 50138

M.F.	BiOF
M.W.	243.98
Description	White Powder
Assay (as a Bi)	99.0% Min.
Water (KF)	0.5% Min.



CAS No. 13520-72-4
Tariff No. 28261990

UN No. 3260**Class 8****PG III****BISMUTH OXY IODIDE**

Grade: LR

(Bismuth Sub Iodide)

Product No: 50173

M.F.	BiOI
M.W.	351.88
Description	Red-Brown Powder
Assay (ex Bi)	98.0% Min.
-200 mesh	100% Pass



CAS No. 7787-63-5
Tariff No. 28276090

NON DG**BISMUTH(III) NITRATE BASIC**

Grade: LR

(Bismuth Oxy Nitrate)

Product No: 50152

M.F.	4Bi(NO ₃)(OH) ₂ BiO(OH)
Description	White, Heavy, Slightly, Hygroscopic Powder
Assay (as a Bi ₂ O ₃)	79.0-82.0% Max.



CAS No. 10361-46-3
Tariff No. 28342990

UN No. 1477**Class 5.1****PG II**

BISMUTH(III) NITRATE BASIC
(Bismuth Sub Nitrate)

Grade: AR

Product No: 50153

M.F.	$\text{BiO}(\text{NO}_3)_3$
Description	White, Heavy, Slightly, Hygroscopic Powder
Assay (ex Bi)	71.0% - 74.0%
Ammonium (NH_4)	0.003% Max.
Arsenic (As)	0.0005% Max.
Calcium (Ca)	0.005% Max.
Chloride (Cl)	0.003% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.005% Max.
Silver (Ag)	0.001% Max.
Sulfate (SO_4)	0.002% Max.
Zinc (Zn)	0.001% Max.



Irritant



Oxidizing

CAS No. 10361-46-3
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

BISMUTH(III) PERCHLORATE OXIDE HYDRATE

Grade: PURE

Product No: 10185

M.F.	$\text{Bi}(\text{O})\text{ClO}_4 \cdot \text{XH}_2\text{O}$
M.W.	324.43 (Anhydrous)
Description	White Crystal
Assay (as a Bi)	60.0% - 63.0%



Harmful



Oxidizing

CAS No. 66172-93-8
Tariff No. 28299010

UN No. 1481

Class 5.1

PG III

BISMUTH(III) PHOSPHATE

Grade: PURE

Product No: 10126

M.F.	BiPO_4
M.W.	303.95
Description	White to Off-White Crystalline Powder
Assay (ex Bi)	98.0% Min.



Irritant

CAS No. 10049-01-1
Tariff No. 28352990

NON DG

BISMUTH(III) SULPHATE

Grade: PURE

Product No: 10181

M.F.	$\text{Bi}_2(\text{SO}_4)_3$
M.W.	706.18
Description	White to Off White Crystalline Powder
Assay (as a Bi)	52.0% - 56.0 %



Irritant

CAS No. 7787-68-0
Tariff No. 28332990

NON DG

BISMUTH(III) SULPHATE

Grade: LR

Product No: 20182

M.F.	$\text{Bi}_2(\text{SO}_4)_3$
M.W.	706.18
Description	White to Off White Powder
Assay (ex Bi)	90.0% Min.
Chloride (Cl)	0.01% Max.
Nitrate (NO_3)	0.025% Max.
Sodium (Na)	0.01% Max.
Potassium (K)	0.005% Max.



Irritant

CAS No. 7787-68-0
Tariff No. 28332990

NON DG

BISMUTH(III) SULPHATE

Grade: AR

Product No: 30183

M.F.	$\text{Bi}_2(\text{SO}_4)_3$
M.W.	706.18
Description	White to Off White Powder
Assay (ex Bi)	99.0% Min.
Chloride (Cl)	0.005% Max.
Nitrate (NO_3)	0.01% Max.
Iron (Fe)	0.01% Max.
Sodium (Na)	0.005% Max.
Potassium (K)	0.001% Max.



Irritant

CAS No. 7787-68-0
Tariff No. 28332990

NON DG

BISMUTH(III) SULFIDE

Grade: PURE

Product No: 10187

M.F.	Bi_2S_3
M.W.	514.15
Description	A Brown Powder
Assay (ex Bi)	98.0% Min.



Irritant

CAS No. 1345-07-9
Tariff No. 28309010

NON DG

Notes

CADMIUM

Symbol - Cd

At.No. 48, At.Wt. 112.41, CAS No. 7440-43-9

CADMIUM ACETATE ANHYDROUS

Grade: PURE

Product No: 104611

M.F. $\text{Cd}(\text{CH}_3\text{COO})_2$
 M.W. 230.50
 Description White Crystalline Powder
 Assay 98.0% Min.



CAS No. 543-90-8
 Tariff No. 29152990

UN No. 3077 Class 9 PG III



CADMIUM ACETATE DIHYDRATE

Grade: LR

Product No: 20462

M.F. $\text{Cd}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$
 M.W. 266.53
 Description White Crystalline Powder
 Assay 98.0% Min.
 Chloride (Cl) 0.002% Max.
 Sulphate (SO_4) 0.01% Max.
 Iron (Fe) 0.002% Max.
 Potassium (K) 0.01% Max.
 Sodium (Na) 0.01% Max.
 Zinc (Zn) 0.02% Max.



CAS No. 5743-04-4
 Tariff No. 29152990

UN No. 3077 Class 9 PG III



CADMIUM ACETATE DIHYDRATE

Grade: AR

Product No: 30463

M.F. $\text{Cd}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$
 M.W. 266.53
 Description Colourless Crystals and Crystalline Powder
 Assay (ex Cd) 99.0% Min.
 pH 5% Solution 6.7 - 7.3
 Water Insoluble Matter 0.003% Max.
 Chloride (Cl) 0.001% Max.
 Sulphate (SO_4) 0.005% Max.
 Iron (Fe) 0.0005% Max.
 Potassium (K) 0.001% Max.
 Sodium (Na) 0.002% Max.
 Zinc (Zn) 0.005% Max.
 Calcium (Ca) 0.005% Max.
 Copper (Cu) 0.001% Max.
 Lead (Pb) 0.001% Max.
 Nitrate (NO_3) 0.005% Max.



CAS No. 5743-04-4
 Tariff No. 29152990

UN No. 3077 Class 9 PG III



CADMIUM BORATE

Grade: PURE

Product No: 10416

M.F. $\text{Cd}_3\text{B}_2\text{O}_6$
 M.W. 454.82
 Assay (ex Cd) 98.0% Min.
 -100 Mesh 100% Pass



CAS No. 51222-60-7
 Tariff No. 28402090

UN No. 2570 Class 6.1 PG III

CADMIUM BROMIDE ANHYDROUS

Grade: PURE

Product No: 104111

M.F. CdBr_2
 M.W. 272.22
 Description Yellow Crystalline Powder
 Assay 98.0% Min.



CAS No. 7789-42-6
 Tariff No. 28275990

UN No. 3077 Class 9 PG III

CADMIUM BROMIDE TETRAHYDRATE

Grade: LR

Product No: 20412

M.F. $\text{CdBr}_2 \cdot 4\text{H}_2\text{O}$
 M.W. 344.28
 Description White Crystals
 Assay (ex Br) 99.0% Min.
 Chloride (Cl) 0.05% Max.
 Nitrate (NO_3) 0.005% Max.
 Sulphate (SO_4) 0.01% Max.
 Iron (Fe) 0.002% Max.
 Potassium (K) 0.005% Max.
 Sodium (Na) 0.005% Max.



CAS No. 13464-92-1
 Tariff No. 28275990

UN No. 3077 Class 9 PG III

CADMIUM CARBONATE

Grade: LR

Product No: 20442

M.F. CdCO_3
 M.W. 172.42
 Description Milky White Powder
 Assay (as a Cd) 62.0% - 66.0%
 Chloride (Cl) 0.01% Max.
 Sulphate (SO_4) 0.01% Max.
 Nitrate (NO_3) 0.1% Max.
 Potassium (K) 0.1% Max.
 Sodium (Na) 0.1% Max.



CAS No. 513-78-0
 Tariff No. 28369990

UN No. 3077 Class 9 PG III

CADMIUM CARBONATE

Grade: AR

Product No: 30443

M.F. CdCO_3
 M.W. 172.42
 Description Milky White Powder
 Assay (ex Cd) 97.0% Min.
 Loss on Ignition 25.5% - 27.5%
 Insoluble in HCl 0.01% Max.
 Chloride (Cl) 0.001% Max.
 Sulphate (SO_4) 0.005% Max.
 Iron (Fe) 0.01% Max.
 Lead (Pb) 0.001% Max.
 Zinc (Zn) 0.05% Max.
 Potassium (K) 0.05% Max.
 Sodium (Na) 0.05% Max.



CAS No. 513-78-0
 Tariff No. 28369990

UN No. 2570 Class: 6.1 PG III

CADMIUM CHLORIDE ANHYDROUS
(Cadmium Chlorided Dryed)

Grade: LR

Product No: 20432 I

M.F.	CdCl ₂
M.W.	183.35
Description	Milky White Free Flowing Crystalline Powder
Assay (ex Cl)	98.0% Min.
Sulphate (SO ₄)	0.02% Max.
Ammonium (NH ₄)	0.01% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.03% Max.
Zinc (Zn)	0.005% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 10108-64-2
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM CHLORIDE ANHYDROUS
(Cadmium Chlorided Dryed)

Grade: ACS

Product No: 40434 I

M.F.	CdCl ₂
M.W.	183.32
Description	Milky White Free Flowing Crystalline Powder
Assay (ex Cl)	99.0% Min.
pH at 5% Solution at 25°C	5.5 - 6.5
Insoluble Matter	0.01% Max.
Loss on drying at 105°C	1.0% Max.
Nitrate & Nitrite (as NO ₃)	0.003% Max.
Sulphate (SO ₄)	0.005% Max.
Ammonium (NH ₄)	0.002% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.001% Max.
Copper (Cu)	0.001% Max.
Lead (Pb)	0.005% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.05% Max.



Corrosive



Toxic

CAS No. 10108-64-2
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM CHLORIDE HEMIPENTAHYDRATE

Grade: LR

Product No: 20432

M.F.	CdCl ₂ 2 1/2 H ₂ O
M.W.	228.35
Description	White Crystals
Assay (ex Cd)	99.0% Min.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.003% Max.
Potassium (K)	0.01% Max.
Nitrate (NO ₃)	0.01% Max.
Sodium (Na)	0.004% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7790-78-5
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM CHLORIDE HEMIPENTAHYDRATE

Grade: AR

Product No: 30433

M.F.	CdCl ₂ 2 1/2 H ₂ O
M.W.	228.35
Description	White Crystals
Assay (ex Cd)	99.5% Min.
pH 5% Solution	4.0 - 6.5
Water Insoluble Matter	0.003% Max.
Nitrogen (N)	0.004% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.002% Max.

Environmental Hazards



Health Hazards

Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.002% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.002% Max.
Zinc (Zn)	0.001% Max.

CAS No. 7790-78-5
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III



Toxic

CADMIUM CHLORIDE HEMIPENTAHYDRATE
(Cadmium Chloride Crystals)

Grade: ACS

Product No: 40434

M.F.	CdCl ₂ 2 1/2 H ₂ O
M.W.	228.35
Description	White Crystal
Assay (as a CdCl ₂)	79.5% - 81.0%
Insoluble Matter	0.005% Max.
Nitrate & Nitrite (as NO ₃)	0.003% Max.
Sulphate (SO ₄)	0.005% Max.
Ammonium (NH ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	5ppm Max.
Potassium (K)	0.005% Max.
Lead (Pb)	0.02% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.05% Max.
Iron (Fe)	5ppm Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7790-78-5
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM CHLORIDE HYDRATE

Grade: LR

Product No: 10433

M.F.	CdCl ₂ XH ₂ O
M.W.	183.32 (Anhydrous basis)
Description	Milky White free flowing Crystalline Powder or Solid chunks
Assay (Compleximetric)	97.5% - 102.5% (Anhyd Basis)
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.002% Max.
Zinc (Zn)	0.02% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 654054-66-7
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM CHLORIDE MONOHYDRATE

Grade: LR

Product No: 10432

M.F.	CdCl ₂ H ₂ O
M.W.	201.32
Description	White Crystalline Powder
Assay (ex Cd)	98.0% Min.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.002% Max.
Zinc (Zn)	0.02% Max.

Corrosive



Toxic

CAS No. 35658-65-2
Tariff No. 28273990

UN No. 2570

Class 6.1

PG III

CADMIUM FLUORIDE

Grade: PURE

Product No: 10437

M.F.	CdF ₂	
M.W.	150.40	
Description	White Crystals	
Assay	98.0% Min.	Environmental Hazards



Health Hazards



Toxic

CAS No. 7790-79-6
Tariff No. 28261990

UN No. 2570

Class 6.1

PG III

CADMIUM HYDROXIDE

Grade: PURE

Product No: 10447

M.F.	Cd(OH) ₂	
M.W.	146.41	
Description	White to Off White Powder	
Assay (as a Cd)	71.0% - 74.0 %	Environmental Hazards



Irritant

CAS No. 21041-95-2
Tariff No. 28259090

UN No. 2570

Class 6.1

PG III

CADMIUM IODIDE

Grade: LR

Product No: 20472

M.F.	CdI ₂	
M.W.	366.22	
Description	Pearly White Flakes or Crystalline Powder	Environmental Hazards
Assay (ex I)	98.0% Min.	
Sulfate (SO ₄)	0.01% Max.	
Sodium (Na)	0.01% Max.	
Potassium (K)	0.01% Max.	



Health Hazards



Toxic

CAS No. 7790-80-9
Tariff No. 28276090

UN No. 2570

Class 6.1

PG III

CADMIUM IODIDE

Grade: AR

Product No: 30473

M.F.	CdI ₂	
M.W.	366.22	
Description	Pearly White Flakes or Crystalline Powder	Environmental Hazards
pH 5% Solution	5.5 - 6.5	
Assay (ex I)	99.5% Min.	
Water Insoluble Matter	0.003% Max.	
Iodate (IO ₃)	0.0005% Max.	
Sulphate (SO ₄)	0.01% Max.	
Calcium (Ca)	0.005% Max.	
Copper (Cu)	0.001% Max.	
Iron (Fe)	0.001% Max.	
Lead (Pb)	0.001% Max.	
Potassium (K)	0.002% Max.	
Sodium (Na)	0.002% Max.	
Zinc (Zn)	0.001% Max.	



Health Hazards



Toxic

CAS No. 7790-80-9
Tariff No. 28276090

UN No. 2570

Class 6.1

PG III

CADMIUM NITRATE TETRAHYDRATE

Grade: LR

Product No: 20452

M.F.	Cd(NO ₃) ₂ ·4H ₂ O	
M.W.	308.48	
Description	White Crystals.	Environmental Hazards
Assay (ex Cd)	99.0% Min.	
Chloride (Cl)	0.001% Max.	
Sulphate (SO ₄)	0.001% Max.	
Iron (Fe)	0.01% Max.	
Sodium (Na)	0.01% Max.	
Zinc (Zn)	0.002% Max.	



Health Hazards



Toxic

CAS No. 10022-68-1
Tariff No. 28342990

UN No. 3087

Class 5.1(6.1)

PG II

CADMIUM NITRATE TETRAHYDRATE

Grade: AR

Product No: 30453

M.F.	Cd(NO ₃) ₂ ·4H ₂ O	
M.W.	308.48	
Description	White Crystals.	Environmental Hazards
Assay (ex Cd)	99.0% Min.	
pH 5% Solution	3.0 - 5.0	
Water Insoluble Matter	0.002% Max.	
Chloride (Cl)	0.001% Max.	
Sulphate (SO ₄)	0.002% Max.	
Calcium (Ca)	0.005% Max.	
Copper (Cu)	0.001% Max.	
Iron (Fe)	0.001% Max.	
Lead (Pb)	0.003% Max.	
Potassium (K)	0.002% Max.	
Sodium (Na)	0.005% Max.	
Zinc (Zn)	0.001% Max.	



Health Hazards



Toxic

CAS No. 10022-68-1
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

CADMIUM NITRATE TETRAHYDRATE

Grade: ACS

Product No: 40454

M.F.	Cd(NO ₃) ₂ ·4H ₂ O	
M.W.	308.48	
Description	White Crystals.	Environmental Hazards
Assay Cd(NO ₃) ₂ ·4H ₂ O	99.0% Min.	
Insoluble Matter	0.005% Max.	
Chloride (Cl)	0.005% Max.	
Sulphate (SO ₄)	0.002% Max.	
Calcium (Ca)	0.02% Max.	
Copper (Cu)	0.002% Max.	
Lead (Pb)	0.005% Max.	
Magnesium (Mg)	0.02% Max.	
Zinc (Zn)	0.05% Max.	
Iron (Fe)	0.001% Max.	



Health Hazards



Toxic

CAS No. 10022-68-1
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

Notes

CADMIUM OXIDE

Grade: LR

Product No: 20407

M.F.	CdO
M.W.	128.40
Description	A Brown Powder
Assay (ex Cd)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO ₄)	0.01% Max.
Iron (Fe)	0.05% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 1306-19-0
Tariff No. 28259020

UN No. 2570

Class 6.1

PG III

CADMIUM OXIDE

Grade: AR

Product No: 30408

M.F.	CdO
M.W.	128.40
Description	A Brown Powder
Assay (ex Cd)	99.5% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO ₄)	0.01% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.005% Max.
Copper (Cu)	0.005% Max.
Iron (Fe)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.01% Max.
Nickel (Ni)	0.005% Max.
Lead (Pb)	0.005% Max.
Zinc (Zn)	0.005% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 1306-19-0
Tariff No. 28259020

UN No. 2570

Class 6.1

PG III

CADMIUM PERCHLORATE HEXAHYDRATE

Grade: LR

Product No: 20445

M.F.	Cd(ClO ₄) ₂ ·6H ₂ O
M.W.	419.42
Assay (ex Cd)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO ₄)	0.005% Max.
Iron (Fe)	0.002% Max.

Environmental Hazards



Irritant



Oxidizing

CAS No. 10326-28-0
Tariff No. 28291990

UN No. 1481

Class 5.1

PG II

CADMIUM SULFATE ANHYDROUS

Grade: LR

Product No: 20482 I

M.F.	CdSO ₄
M.W.	208.47
Description	A White Powder
Assay (ex Cd)	99.0% Min.
Chloride (Cl)	0.01% Max.
Lead (Pb)	0.005% Max.
Iron (Fe)	0.001% Max.

Environmental Hazards



Health Hazards

CAS No. 10124-36-4
Tariff No. 28332920

UN No. 2570

Class 6.1

PG III



Toxic

CADMIUM SULFATE ANHYDROUS

Grade: AR

Product No: 30483 I

M.F.	CdSO ₄
M.W.	208.47
Description	A White Powder
Assay (ex Cd)	99.0% Min.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.0005% Max.
Nitrate & Nitrite (as NO ₃)	0.05% Max.
Calcium (Ca)	0.001% Max.
Copper (Cu)	0.0002% Max.
Lead (Pb)	0.0005% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.05% Max.

Environmental Hazards



Health Hazards

Iron (Fe) 0.0001% Max.

CAS No. 10124-36-4
Tariff No. 28332920

UN No. 2570

Class 6.1

PG III



Toxic

CADMIUM SULFATE ANHYDROUS

Grade: ACS

Product No: 40484 I

M.F.	CdSO ₄
M.W.	208.47
Description	A White Powder
Assay (ex Cd)	99.0% Min.
Insoluble Matter	0.005% Max.
Loss on drying at 150°C	1.0% Max.
Chloride (Cl)	0.001% Max.
Nitrate & Nitrite (as NO ₃)	0.003% Max.
Calcium (Ca)	0.01% Max.
Copper (Cu)	0.002% Max.
Lead (Pb)	0.003% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.05% Max.
Iron (Fe)	0.001% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 10124-36-4
Tariff No. 28332920

UN No. 2570

Class 6.1

PG III

CADMIUM SULPHATE OCTAHYDRATE

Grade: LR

Product No: 20482

M.F.	3CdSO ₄ ·8H ₂ O
M.W.	769.50
Description	Colourless white Crystals or Crystalline Powder
Assay (ex Cd)	98% - 103%
Chloride (Cl)	0.005% Max.
Calcium (Ca)	0.01% Max.
Sodium (Na)	0.01% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7790-84-3
Tariff No. 2833 29 20

UN No. 2570

Class 6.1

PG III

CADMIUM SULPHATE OCTAHYDRATE

Grade: AR

Product No: 30483

M.F.	$3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$
M.W.	769.50
Description	Colourless White Crystals or Crystalline Powder
Assay (ex Cd)	99.0% Min.
pH 5% Solutions	4.0 - 6.0
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.002% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.002% Max.

CAS No. 7790-84-3

Tariff No. 28332920

UN No. 2570

Class 6.1

PG III

Environmental Hazards



Health Hazards



Toxic

CADMIUM SULFIDE

Grade: LR

Product No: 20487

M.F.	CdS
M.W.	144.47
Description	Yellowish to Orange Powder
Assay (as a Cd)	70.0% - 73.0%
Water Soluble Matter	2.0% Max.
Chloride (Cl)	0.02% Max.
Iron (Fe)	0.03% Max.

CAS No. 1306-23-6

Tariff No. 28309000

UN No. 3077

Class 9

PG III

Environmental Hazards



Irritant



Toxic

CADMIUM SULPHATE OCTAHYDRATE

Grade: ACS

(Cadmium Sulphate Crystals)

Product No: 40484

M.F.	$3\text{Cd}(\text{SO}_4)_4 \cdot 8\text{H}_2\text{O}$
Description	Colourless White Crystals or Crystalline Powder
Assay (as a $3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Nitrate and nitrite (as NO_3)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Lead (Pb)	0.003% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.
Zinc (Zn)	0.05% Max.
Iron (Fe)	0.001% Max.

CAS No. 7790-84-3

Tariff No. 28332920

UN No. 2570

Class 6.1

PG III

Environmental Hazards



Health Hazards



Toxic

Notes

CALCIUM

At.No. 20, At.Wt. 40.08, CAS No. 7440-70-2

Symbol - Ca

CALCIUM ACETATE HYDRATE

Grade: LR

Product No: 218621

M.F.	$\text{Ca}(\text{CH}_3\text{COO})_2 \cdot \text{XH}_2\text{O}$
M.W.	158.17 (Anhyd.)
Description	Fine White Powder
Assay	97.0% Min.
Loss on drying at 200°C	7.0% Max.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.2% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.



Irritant

CAS No. 114460-21-8

Tariff No. 29152900

NON DG

CALCIUM ACETATE HYDRATE

Grade: AR

Product No: 318631

M.F.	$\text{Ca}(\text{CH}_3\text{COO})_2 \cdot \text{XH}_2\text{O}$
M.W.	158.17 (Anhyd.)
Description	Fine White Powder
Assay	99.0% Min.
Barium (Ba)	0.003% Max.
Chloride (Cl)	0.003% Max.
Fluoride (F)	0.005% Max.
Sulphate (SO_4)	0.03% Max.
Heavy Metals (as Pb)	0.001% Max.
Arsenic (As)	0.0003% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.
Water (KF)	7.0% Max.



Irritant

CAS No. 114460-21-8

Tariff No. 29152900

NON DG

CALCIUM ACETATE MONOHYDRATE

Grade: AR

Product No: 31863

M.F.	$\text{Ca}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$
M.W.	176.18
Description	White Crystalline Powder
Assay	99.0% Min.
Reaction	7.0 - 9.0
Water Insoluble Matter	0.005 Max.
Chloride (Cl)	0.0005% Max.
Sulfate (SO_4)	0.001% Max.
Ammonium (NH_4)	0.001% Max.
Barium (Ba)	0.01% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.002% Max.
Nickel (Ni)	0.0005% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.01% Max.
Zinc (Zn)	0.01% Max.



No GHS

CAS No. 5743-26-0

Tariff No. 29152990

NON DG

CALCIUM ACETATE MONOHYDRATE

Grade: ACS

Product No: 41864

M.F.	$\text{C}_4\text{H}_6\text{O}_4\text{Ca} \cdot \text{H}_2\text{O}$
M.W.	176.18
Description	White Crystalline Powder
Assay	99.0% Min.
Insoluble Matter	0.005% Max.
Alkalinity	To Pass test
Titration Acid	0.035 meq/g Max.
Chloride (Cl)	0.001% Max.
Sulfate (SO_4)	0.01% Max.
Barium (Ba)	0.01% Max.
Heavy Metals (as Pb)	0.005% Max.
Iron (Fe)	0.001% Max.
Magnesium (Mg)	0.05% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.
Strontium (Sr)	0.05% Max.



No GHS

CAS No. 5743-26-0

Tariff No. 29152990

NON DG

CALCIUM BROMIDE ANHYDROUS

Grade: LR

Product No: 218111

M.F.	$\text{CaBr}_2 \cdot \text{XH}_2\text{O}$
M.W.	199.90 (Anhyd.)
Description	A White Crystalline Powder
Assay (ex Br)	98.0% Min.
Chloride (Cl)	0.05% Max.
Sulfate (SO_4)	0.05% Max.
Iron (Fe)	0.01% Max.



Irritant

CAS No. 7789-41-5

Tariff No. 28275990

NON DG

CALCIUM BROMIDE HYDRATE

Grade: PURE

Product No: 11811

M.F.	$\text{CaBr}_2 \cdot \text{XH}_2\text{O}$
M.W.	199.90 (Anhyd.)
Description	A White Crystalline Powder
Assay (ex Br)	95.0% Min.



Irritant

CAS No. 71626-99-8

Tariff No. 28275990

NON DG

CALCIUM BROMIDE DIHYDRATE

Grade: LR

Product No: 21811

M.F.	$\text{CaBr}_2 \cdot 2\text{H}_2\text{O}$
M.W.	235.94
Description	A White Crystalline Powder
Assay (ex Br)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO_4)	0.05% Max.
Iron (Fe)	0.01% Max.



No GHS

CAS No. 22208-73-7

Tariff No. 28275990

NON DG

CALCIUM CARBONATE

Grade: LR

Product No: 21842

M.F.	CaCO ₃
M.W.	100.09
Description	White Powder
Assay	99.0% Min.
Chloride (Cl)	0.05% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.01% Max.



No GHS

CAS No. 471-34-1

Tariff No. 28365000

NON DG

CALCIUM CARBONATE

Grade: AR

Product No: 31843

M.F.	CaCO ₃
M.W.	100.09
Description	White Powder
Assay	99.5% Min.
HCl Insoluble Matter	0.005% Max.
Water Soluble Alkali [Ca(OH) ₂]	0.01% Max.
Chloride (Cl)	0.005% Max.
Nitrogen (N)	0.1% Max.
Barium (Ba)	0.01% Max.
Sulfate (SO ₄)	0.005% Max.
Copper (Cu)	0.005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.02% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.
Strontium (Sr)	0.06% Max.



No GHS

CAS No. 471-34-1

Tariff No. 28365000

NON DG

CALCIUM CARBONATE

Grade: ACS

Product No: 41844

MF	CaCO ₃
MW	100.10
Description	White Powder
Assay	99.0 % Min.
Insoluble in Dil HCl	0.01 % Max
Chloride (Cl)	0.001 % Max
Fluoride (F)	0.0015 % Max
Sulfate (SO ₄)	0.01 % Max
Ammonium (NH ₄)	0.003 % Max
Heavy Metals (ICP-OES)	0.001 % Max
[Ag, As, Bi,Cd, Cu,Hg,Mo,Pb,Sb,Sn]	
Iron (Fe)	0.003 % Max
Barium (Ba)	0.01 % Max
Magnesium (Mg)	0.02 % Max
Potassium (K)	0.01 % Max
Sodium (Na)	0.1 % Max
Strontium (Sr)	0.1 % Max



No GHS

CAS No. 471-34-1

Tariff No. 28365000

NON DG

CALCIUM IODIDE HEXAHYDRATE

Grade: PURE

Product No: 11873

M.F.	CaI ₂ .6H ₂ O
M.W.	401.89
Description	White/Cream to Yellow
Assay (ex I)	Hygroscopic Crystal
	98.0% Min.



No GHS

CAS No. 71626-98-7

Tariff No. 28276090

NON DG

CALCIUM PERCHLORATE ANHYDROUS

Grade: PURE

Product No: 118451

M.F.	Ca(ClO ₄) ₂
M.W.	238.98
Description	White Crystalline Powder
Assay(ex Ca)	98.0% Min.
Loss on Drying	5.0 % Max.
-30 Mesh	100 % Pass



Irritant



Oxidizing

CAS No. 13477-36-6

Tariff No. 28299010

UN No. 1455

Class 5.1

PG II

CALCIUM PERCHLORATE TETRAHYDRATE

Grade: AR

Product No: 31845

M.F.	Ca(ClO ₄) ₂ .4H ₂ O
M.W.	311.06
Description	White Crystalline powder
pH 5% Solution	5.0 - 8.0
Assay (as a Ca)	12.0% - 13.5%
Chloride (Cl)	0.003% Max.
Sulfate (SO ₄)	0.001% Max.
Iron(Fe)	0.0005% Max.
Heavy Metals (Pb)	0.0005% Max.



Irritant



Oxidizing

CAS No. 15627-86-6

Tariff No. 28299010

UN No. 1455

Class 5.1

PG II

Notes

CESIUM

At.No. 55, At.Wt. 132.90, CAS No. 7440-46-2

Symbol - Cs

CESIUM BROMIDE

Grade: PURE

Product No: 13011

M.F. CsBr
M.W. 212.81
Description White powder or crystals or chunks
Assay (Complexo) (ex Cs) 98.0 % Min



Irritant

CAS No. 7787-69-1
Tariff No. 28275990

NON DG

CESIUM BROMIDE 99.9 %

Grade: ULTRA PURE

Product No: 53015

M.F. CsBr
M.W. 212.81
Description White powder or crystals or chunks
Assay (Arginometric) (as Br) 36.9% - 38.1%
Total trace metals 1500 ppm max (ICP-OES)



Irritant

CAS No. 7787-69-1
Tariff No. 28275990

NON DG

CESIUM CHLORIDE

Grade: LR

Product No: 23032

M.F. CsCl
M.W. 168.36
Description White powder
Assay (Complexo)(ex Cs) 99.0 % Min.
Heavy Metals (as Pb) 0.002 % Max.
Sulfate (SO₄) 0.01 % Max.
Iron (Fe) 0.001 % Max.



Health Hazards

CAS No. 7787-69-1
Tariff No. 28275990

NON DG

CESIUM CHLORIDE

Grade: AR

Product No: 33033

M.F. CsCl
M.W. 168.36
Description White powder
Assay (Complexo)(ex Cs) 99.5 % Min.
Sulfate (So₄) 0.002 % Max.
Aluminum (Al) 0.0005 % Max.
Copper (Cu) 0.0003 % Max.
Iron (Fe) 0.0003 % Max.
Lithium (Li) 0.00005 % Max.
Magnesium (Mg) 0.0005 % Max.
Potassium (K) 0.002 % Max.
Sodium (Na) 0.002 % Max.
Lead (Pb) 0.0001 % Max.
Rubidium (Rb) 0.008 % Max.
Zinc (Zn) 0.0003 % Max.



Health Hazards

CAS No. 7647-17-8
Tariff No. 28273990

NON DG

CESIUM CHLORIDE 99.9 %

Grade: ULTRA PURE

Product No: 53035

M.F. CsCl
M.W. 168.36
Description White powder
Assay (Arginometric) (as Cl) 20.8 - 21.3 %
Total trace metals 1500 ppm max (ICP-OES)



Health Hazards

CAS No. 7647-17-8
Tariff No. 28273990

NON DG

CESIUM FLUORIDE 99.9 %

Grade: ULTRA PURE

Product No: 53039

M.F. CsF
M.W. 151.90
Description White powder or crystals or chunks
Assay (as F) 12.0 - 13.0 %
Total trace metals 1500 ppm max (ICP-OES)



Health Hazards



Corrosive



Toxic

CAS No. 13400-13-0
Tariff No. 28261990

UN No. 3288

Class 6.1

PG II

CESIUM IODIDE 99.9 %

Grade: ULTRA PURE

Product No: 53075

M.F. CsI
M.W. 259.81
Description White powder or crystals or chunks
Assay (as I) 48.1% - 49.6 %
Total trace metals 1500 ppm max (ICP-OES)



Health Hazards

CAS No. 7789-17-5
Tariff No. 28276090

UN No. 3077

Class 9

PG III



Irritant

CESIUM NITRATE

Grade: PURE

Product No: 13051

M.F. CsNO₃
M.W. 194.91
Description White powder or crystals or chunks
Assay (by NaOH) 98.5 % - 101.5 %



Health Hazards

CAS No. 7789-18-6
Tariff No. 28276090

UN No. 1415

Class 5.1

PG III



Irritant

Notes

COBALT

At.No. 58.93, At.Wt. 27, CAS No. 7440-48-4

Symbol - Co

COBALT(II) ACETATE TETRAHYDRATE

Grade: LR

Product No: 20362

M.F.	$\text{Co}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
M.W.	249.08
Description	Reddish Violet, Deliquescent Crystals
Assay (ex Co)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.001% Max.
Nickel (Ni)	0.1% Max.



Irritant



Toxic

CAS No. 6147-53-1

Tariff No. 29152990

UN No. 3077

Class 9

PG III

COBALT(II) ACETATE TETRAHYDRATE

Grade: AR

Product No: 30363

M.F.	$\text{Co}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
M.W.	249.08
Description	Reddish Violet, Deliquescent Crystals
Assay (ex Co)	99.0% Min.
pH 5% Solution	6.0 - 8.0
Chloride (Cl)	0.001% Max.
Sulphate (SO_4)	0.005% Max.
Total Nitrogen (N)	0.002% Max.
Calcium (Ca)	0.01% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.02% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.001% Max.



Irritant



Toxic

CAS No. 6147-53-1

Tariff No. 29152990

UN No. 3077

Class 9

PG III

COBALT(II) ACETATE TETRAHYDRATE

Grade: ACS

Product No: 40364

M.F.	$\text{Co}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
M.W.	249.08
Description	Reddish Violet, Deliquescent Crystals
Assay (ex Co)	98.0% - 102.0%
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.002% Max.
Nitrate (NO_3)	0.01% Max.
Sulphate (SO_4)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.1% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.01% Max.



Irritant



Toxic

CAS No. 6147-53-1

Tariff No. 29152990

UN No. 3077

Class 9

PG III

COBALT(II) AMMONIUM SULPHATE HEXAHYDRATE

Grade: PURE

Product No: 1031181

M.F.	$\text{CoSO}_4 \cdot (\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$
M.W.	395.23
Description	Reddish Crystal
Assay (ex Co)	99.0% Min.



Irritant

CAS No. 13586-38-4

Tariff No. 28429090

NON DG

COBALT(II) BROMIDE ANHYDROUS

Grade: LR

Product No: 203131

M.F.	CoBr_2
M.W.	218.75
Description	Hygroscopic Green Powder
Assay (ex Co)	99.0% Min.
Sulphate (SO_4)	0.02% Max.
Iron (Fe)	0.005% Max.



Health Hazards

CAS No. 7789-43-7

Tariff No. 28275990

NON DG



Irritant

COBALT(II) BROMIDE HEXAHYDRATE

Grade: LR

Product No: 20313

M.F.	$\text{CoBr}_2 \cdot 6\text{H}_2\text{O}$
M.W.	326.83
Description	Red Violet Crystals
Assay (ex Co)	99.0% Min.
Sulphate (SO_4)	0.02% Max.
Iron (Fe)	0.005% Max.
Nickel (Ni)	0.15% Max.



Irritant

CAS No. 85017-77-2

Tariff No. 28275990

NON DG

COBALT(II) CARBONATE

Grade: LR

Product No: 20342

M.F.	CoCO_3 Approx.
M.W.	118.94
Description	Red Violet Powder
Assay (as a Co)	47.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.05% Max.
Ammonium (NH_4)	0.1% Max.
Iron (Fe)	0.1% Max.
Nickel (Ni)	0.5% Max.



No GHS

CAS No. 12602-23-2

Tariff No. 28369990

NON DG

Notes

COBALT(II) CHLORIDE ANHYDROUS

Grade: LR

Product No: 20332 I

M.F.	CoCl ₂
M.W.	129.84
Description	Blue Crystalline Powder
Assay (ex Co)	98.5% Min.
Loss on Drying	1.0% Max.



Environmental Hazards



Irritant



Health Hazards

CAS No. 7646-79-9
Tariff No. 28273400

UN No. 3077

Class 9

PG III

COBALT(II) CHLORIDE HEXAHYDRATE

Grade: LR

Product No: 20332

M.F.	CoCl ₂
M.W.	237.93
Description	Ruby Red Crystals
Assay (ex Co)	97.0 % Min.
Sulphate (SO ₄)	0.03% Max.
Iron (Fe)	0.01% Max.
Nickel (Ni)	0.3% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.025% Max.



Environmental Hazards



Irritant



Health Hazards

CAS No. 7791-13-1
Tariff No. 28273400

UN No. 3077

Class 9

PG III

COBALT(II) CHLORIDE HEXAHYDRATE

Grade: AR

Product No: 30333

M.F.	CoCl ₂ ·6H ₂ O
M.W.	237.93
Description	Ruby Red Crystals
Assay (ex Co)	99.0% Min.
pH 5% Solution	3.0 - 5.5
Water Insoluble Matter	0.003% Max.
Nitrogen (N)	0.003% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.002% Max.
Manganese (Mn)	0.001% Max.
Nickel (Ni)	0.01% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.002% Max.



Environmental Hazards



Irritant



Health Hazards

CAS No. 7791-13-1
Tariff No. 28273400

UN No. 3077

Class 9

PG III

COBALT(II) CHLORIDE HEXAHYDRATE

Grade: ACS

Product No: 40334

M.F.	CoCl ₂ ·6H ₂ O
M.W.	237.93
Description	Ruby Red Crystals
Assay (ex Co)	98.0% - 102.0%
Insoluble Matter	0.01% Max.
Nitrate (NO ₃)	0.01% Max.
Sulphate (SO ₄)	0.01% Max.
Ammonium (NH ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.005% Max.
Magnesium (Mg)	0.005% Max.



Environmental Hazards



Irritant

Nickel (Ni)
Potassium (K)
Sodium (Na)
Zinc (Zn)0.1% Max.
0.01% Max.
0.05% Max.
0.03% Max.

Health Hazards

CAS No. 7791-13-1
Tariff No. 28273400

UN No. 3077

Class 9

PG III

COBALT(II) FLUORIDE ANHYDROUS

Grade: PURE

Product No: 10337 I

M.F.
M.W.
Assay (ex Co)CoF₂
96.33
98.0% Min.

Corrosive

CAS No. 10026-17-2
Tariff No. 28261990

UN No. 2923

Class 8(6.1)

PG III



Toxic

COBALT(II) FLUORIDE TETRAHYDRATE

Grade: PURE

Product No: 20337

M.F.
M.W.
Description
Assay (ex Co)CoF₂·4H₂O
168.99
Reddish Crystalline Powder
99.0% Min.

Corrosive

CAS No. 13817-37-3
Tariff No. 28261990

UN No. 2923

Class 8(6.1)

PG III



Toxic

COBALT(II) HYDROXIDE

Grade: PURE

Product No: 10348

M.F.
M.W.
Description
Assay (as a Co)Co(OH)₂
92.95
Rose Red Powder
61.0% - 63.0%

Irritant

CAS No. 21041-93-0
Tariff No. 28259090

NON DG

COBALT(II) IODIDE ANHYDROUS

Grade: PURE

Product No: 10373 I

M.F.
M.W.
DescriptionCoI₂
312.77
Dark Grey-Green
Crystalline Powder
97.0% Min.

Irritant

Assay (ex Co)

CAS No. 15238-00-3
Tariff No. 28276090

NON DG

Notes

COBALT(II) NITRATE HEXAHYDRATE

Grade: LR

Product No: 20352

M.F.	$\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	291.03
Description	Red Crystal, Deliquescent in Moist Air
Assay (ex Co)	98.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.03% Max.
Iron (Fe)	0.01% Max.
Nickel (Ni)	0.1% Max.
Potassium (K)	0.01% Max.

Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10026-22-9
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

COBALT(II) NITRATE HEXAHYDRATE

Grade: AR

Product No: 30353

M.F.	$\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	291.03
Description	Red Crystal, Deliquescent in Moist Air
Assay (ex Co)	99.0% Min.
pH 5% Solution	2.5 - 5.5
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO_4)	0.005% Max.
Ammonium (NH_4)	0.1% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.002% Max.
Manganese (Mn)	0.002% Max.
Nickel (Ni)	0.01% Max.
Potassium (K)	0.003% Max.
Zinc (Zn)	0.005% Max.

Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10026-22-9
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

COBALT(II) NITRATE HEXAHYDRATE

Grade: ACS

Product No: 40354

M.F.	$\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	291.03
Description	Red Crystal, Deliquescent in Moist Air
Assay (ex Co)	98.0% - 102.0%
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.002% Max.
Sulfate (SO_4)	0.005% Max.
Ammonium (NH_4)	0.2% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.002% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.15% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.01% Max.

Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10026-22-9
Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

COBALT(II) OXALATE ANHYDROUS

Grade: PURE

Product No: 103721

M.F.	CoC_2O_4
M.W.	146.95
Assay (ex Co)	98.0% Min.
Description	Reddish Pink Powder.



Toxic

CAS No. 814-89-1
Tariff No. 29171130

UN No. 3282

Class 6.1

PG III

COBALT OXALATE DIHYDRATE

Grade: PURE

Product No: 10372

M.F.	$\text{CoC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$
M.W.	182.98
Description	Reddish Pink Powder
Assay (ex Co)	97.0% Min.



Irritant

CAS No. 5965-38-8
Tariff No. 29171130

NON DG

COBALT(II,III) OXIDE

Grade: LR

Product No: 20308

M.F.	Co_3O_4
M.W.	240.80
Description	Fine Black Powder
Assay (as a Co)	70.0% Min.
Iron (Fe)	0.1% Max.
Nickel (Ni)	0.02% Max.
Lead (Pb)	0.01% Max.



Irritant



Toxic

CAS No. 1308-06-1
Tariff No. 28220010

NON DG

COBALT(II,III) OXIDE

Grade: AR

Product No: 30309

M.F.	Co_3O_4
M.W.	240.80
Description	Fine Black Powder
Assay (as a Co)	71.0% Min.
Iron (Fe)	0.01% Max.
Nickel (Ni)	0.01% Max.
Total Sulphur (S)	0.001% Max.
Lead (Pb)	0.001% Max.



Irritant



Toxic

CAS No. 1308-06-1
Tariff No. 28220010

NON DG

Notes

COBALT(II) PERCHLORATE DIHYDRATE

Grade: LR

Product No: 20345 I

M.F.	$\text{Co}(\text{ClO}_4)_2 \cdot 2\text{H}_2\text{O}$
M.W.	293.95
pH 5% Solution	1.0 - 4.0
Assay (as a Co)	19.0% - 21.0%
Sulfate (SO_4)	0.005% Max.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.01% Max.



Harmful



Oxidizing

CAS No. 13455-31-7

Tariff No. 28299010

UN No. 1481

Class 5.1

PG III

COBALT(II) PERCHLORATE HEXAHYDRATE

Grade: LR

Product No: 20345

M.F.	$\text{Co}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$
M.W.	366.74
pH 5% Solution	1.0 - 4.0
Insoluble Matter	0.01% Max.
Sulfate (SO_4)	0.005% Max.
Assay (as a Co)	15.5% - 16.7%
Chloride (Cl)	0.01% Max.



Oxidizing



Health Hazards

CAS No. 13478-33-6

Tariff No. 28299010

UN No. 1481

Class 5.1

PG III

COBALT(II) SULFATE ANHYDROUS

Grade: PURE

Product No: 10381 I

M.F.	CoSO_4
M.W.	155.00
Description	Reddish Brown Powder
Assay (ex Co)	98.0% Min.
Loss on Drying	2.0% Max.



Environmental Hazards

CAS No. 10124-43-3

Tariff No. 28332990

UN No. 3077

Class 9

PG III

COBALT(II) SULPHATE HEPTAHYDRATE

Grade: LR

Product No: 20382

M.F.	$\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$
M.W.	281.10
Description	Small Red Crystals or Crystalline Powder
Assay (ex Co)	99.0% Min.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.01% Max.
Nickel (Ni)	0.5% Max.



Environmental Hazards



Health Hazards

CAS No. 10026-24-1

Tariff No. 28332990

UN No. 3077

Class 9

PG III



Irritant

COBALT(II) SULPHATE HEPTAHYDRATE

Grade: AR

Product No: 30383

M.F.	$\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$
M.W.	281.10
Description	Small Red Crystals or Crystalline Powder
Assay (ex Co)	99.0% Min.
pH 5% Solution	3 - 5.5
Water Insoluble Matter	0.003% Max.
Nitrogen (N)	0.002% Max.
Chloride (Cl)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.
Manganese (Mn)	0.001% Max.
Nickel (Ni)	0.01% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.005% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 10026-24-1

Tariff No. 28332990

UN No. 3077

Class 9

PG III

COBALT(II) SULPHATE HEPTAHYDRATE

Grade: ACS

Product No: 40384

M.F.	$\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$
M.W.	281.10
Description	Small Red Crystals or Crystalline Powder
Assay (ex Co)	99.0% Min.
Chloride (Cl)	0.001% Min.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.0005% Max.
Potassium (K)	0.005% Max.
Magnesium (Mg)	0.01% Max.
Sodium (Na)	0.01% Max.
Nickel (Ni)	0.005% Max.
Lead (Pb)	0.001% Max.
Zinc (Zn)	0.005% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 10026-24-1

Tariff No. 28332990

UN No. 3077

Class 9

PG III

COBALT(II) SULPHATE MONOHYDRATE

Grade: LR

Product No: 20383 I

M.F.	$\text{CoSO}_4 \cdot \text{H}_2\text{O}$
M.W.	173.10
Assay (ex Co)	98.0% Min.
Chloride (Cl)	0.01% Max.
Iron (Fe)	0.05% Max.
Nickel (Ni)	0.5% Max.



Environmental Hazards

CAS No. 60459-08-07

Tariff No. 28332990

UN No. 3077

Class 9

PG III

COBALT(II) THIOCYANATE

Grade: PURE

Product No: 10393

M.F.	$\text{Co}(\text{SCN})_2$
M.W.	175.10
Description	Reddish Powder
Assay (ex Co)	97.0% Min.



Environmental Hazards

CAS No. 3017-60-5

Tariff No. 28429090

UN No. 3077

Class 9

PG III



Irritant

Notes

COPPER

At.No. 29, At.Wt. 63.54, CAS No. 7440-50-8

Symbol - Cu

COPPER(II) ACETATE ANHYDROUS

Grade: LR

(Cupric Acetate Anhydrous)**Product No: 215621**

M.F.	$\text{Cu}(\text{CH}_3\text{COO})_2$
M.W.	181.63
Description	Greenish White Crystalline Powder with Odour of Acetic Acid
Assay (ex Cu)	98.0% Min.
Chloride (Cl)	0.05% Max.
Sulphate (SO_4)	0.05% Max.
Iron (Fe)	0.02% Max.

CAS No. 142-71-2**Tariff No. 29152990****UN No. 3077****Class 9****PG III****COPPER(II) ACETATE MONOHYDRATE**

Grade: LR

(Cupric Acetate Monohydrate)**Product No: 21562**

M.F.	$\text{Cu}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$
M.W.	199.65
Description	Dark Green Transparent Crystals or Crystalline Powder with Odour or Acetic Acid
Assay (ex Cu)	98.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.03% Max.
Iron (Fe)	0.02% Max.
Alkalis (Sulphated)	0.3% Max.

CAS No. 6046-93-1**Tariff No. 2915 29 90****UN No. 3077****Class 9****PG III****COPPER(II) ACETATE MONOHYDRATE**

Grade: AR

(Cupric Acetate Monohydrate)**Product No: 31563**

M.F.	$\text{Cu}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$
M.W.	199.65
Description	Dark Green Transparent Crystals or Crystalline Powder with Odour or Acetic Acid
Assay (ex Cu)	99.0% Min.
pH 5% Solution	5.0 - 5.5
Water Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO_4)	0.005% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.002% Max.
Nickel (Ni)	0.002% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.002% Max.

CAS No. 6046-93-1**Tariff No. 29152990****UN No. 3077****Class 9****PG III****COPPER(II) ACETATE MONOHYDRATE**

Grade: ACS

(Cupric Acetate Monohydrate)**Product No: 41564**

M.F.	$\text{Cu}(\text{CH}_3\text{COO})_2 \cdot \text{H}_2\text{O}$
M.W.	199.65
Description	Dark Green transparent Crystals or Crystalline Powder with Odour or Acetic Acid
Assay (ex Cu)	99.0% Min.



Insoluble Matter
Chloride (Cl)
Sulfate (SO_4)
Calcium (Ca)
Iron (Fe)
Nickel (Ni)
Potassium (K)
Sodium (Na)

0.01% Max.
0.003% Max.
0.01% Max.
0.005% Max.
0.002% Max.
0.01% Max.
0.01% Max.
0.05% Max.

**CAS No. 6046-93-1****Tariff No. 29152990****UN No. 3077****Class 9****PG III****COPPER(II) BROMIDE**

Grade: LR

(Cupric Bromide)**Product No: 21512**

M.F.	CuBr_2
M.W.	223.35
Description	Black Crystalline Powder
Assay (ex Cu)	99.0% Min.
Sulphate (SO_4)	0.1% Max.
Iron (Fe)	0.1% Max.

CAS No. 7789-45-9**Tariff No. 28275990****UN No. 3260****Class 8****PG III****COPPER(II) HYDROXIDE CARBONATE**

Grade: LR

(Cupric Carbonate Basic)**Product No: 21542**

M.F.	$\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$
M.W.	239.10
Description	Green Powder
Assay (as a Cu)	51.0% - 55.0%
Chloride (Cl)	0.05% Max.
Sulfate (SO_4)	0.2% Max.
Iron (Fe)	0.2% Max.

CAS No. 12069-69-1**Tariff No. 28369990****NON DG****COPPER(II) HYDROXIDE CARBONATE**

Grade: AR

(Cupric Carbonate Basic)**Product No: 31543**

M.F.	$\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2 \cdot \text{H}_2\text{O}$
M.W.	239.10
Description	Green Powder
Assay (as a Cu)	Not less than 55.0% Min.
Chloride (Cl)	0.03% Max.
Sulfate (SO_4)	0.2% Max.
Iron (Fe)	0.2% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.5% Max.

CAS No. 12069-69-1**Tariff No. 28369990****NON DG**

Notes

COPPER(II) CHLORIDE ANHYDROUS

Grade: LR

(Cupric Chloride Anhydrous)**Product No: 215321**

M.F.	CuCl ₂
M.W.	134.45
Description	Brownish Yellow Crystalline Powder
Assay (ex Cu)	99.0% Min.
Loss on Drying (110°C)	1.0% Max.

CAS No. 7447-39-4**Tariff No. 28274190****UN No. 2802****Class 8****PG III**

Environmental Hazards



Irritant

COPPER(II) CHLORIDE DIHYDRATE

Grade: LR

(Cupric Chloride Dihydrate)**Product No: 21532**

M.F.	CuCl ₂ ·2H ₂ O
M.W.	170.48
Description	Moist Blue, Bluish Green or Green Crystals
Assay (ex Cu)	99.0% Min.
Sulfate (SO ₄)	0.5% Max.
Iron (Fe)	0.02% Max.
Barium (Ba)	0.5% Max.

CAS No. 10125-13-0**Tariff No. 28274190****UN No. 2802****Class 8****PG III**

Environmental Hazards



Irritant



Corrosive

COPPER(II) CHLORIDE DIHYDRATE

Grade: AR

(Cupric Chloride Dihydrate)**Product No: 31534**

M.F.	CuCl ₂ ·2H ₂ O
M.W.	170.48
Description	Moist blue, Bluish Green or Green Crystals
Assay (ex Cu)	99.0% Min.
pH 5% Solution	3.0 - 3.8
Water insoluble Matter	0.003% Max.
Nitrogen (N)	0.004% Max.
Sulphate (SO ₄)	0.01% Max.
Arsenic (As)	0.001% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.004% Max.
Nickel (Ni)	0.001% Max.
Sodium (Na)	0.005% Max.
Barium (Ba)	0.05% Max.

CAS No. 10125-13-0**Tariff No. 28274190****UN No. 2802****Class 8****PG III**

Environmental Hazards



Irritant



Corrosive

COPPER(II) CHLORIDE DIHYDRATE

Grade: ACS

(Cupric Chloride Dihydrate)**Product No: 41535**

M.F.	CuCl ₂ ·2H ₂ O
M.W.	170.48
Description	Moist Blue, Bluish Green or Green Crystals
Assay (ex Cu)	99.0% Min.
Water Insoluble Matter	0.01% Max.
Nitrate (NO ₃)	0.015% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Iron (Fe)	0.005% Max.
Nickel (Ni)	0.01% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.

CAS No. 10125-13-0**Tariff No. 28274190****UN No. 2802****Class 8****PG III**

Environmental Hazards



Irritant



Corrosive

COPPER(II) HYDROXIDE

Grade: PURE

(Cupic Hydroxide)**Product No: 11546**

M.F.	Cu(OH) ₂
M.W.	97.56
Description	Bluish Green Powder
Assay (ex Cu)	94.0% Min.

CAS No. 20427-59-2**Tariff No. 28255000****NON DG**

No GHS

COPPER(II) NITRATE TRIHYDRATE

Grade: LR

(Cupic Nitrate Trihydrate)**Product No: 21522**

M.F.	Cu(NO ₃) ₂ ·3H ₂ O
M.W.	241.60
Description	Hygroscopic Blue Crystals with an Order of Nitric Acid
Assay (ex Cu)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.005% Min.
Iron (Fe)	0.02% Max.

CAS No. 10031-43-3**Tariff No. 28342990****UN No. 1477****Class 5.1****PG II**

Corrosive



Environmental Hazards



Irritant



Oxidizing

COPPER(II) NITRATE TRIHYDRATE

Grade: AR

(Cupric Nitrate Trihydrate)**Product No: 31553**

M.F.	Cu(NO ₃) ₂ ·3H ₂ O
M.W.	241.60
Description	Hygroscopic Blue Crystals with an Order of Nitric Acid
Assay (ex Cu)	99.5% Min.
pH 5% Solution	2.8 - 4.0
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO ₄)	0.0025% Max.
Calcium (Ca)	0.002% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.002% Max.
Nickel (Ni)	0.002% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.

CAS No. 10031-43-3**Tariff No. 28342990****UN No. 1477****Class 5.1****PG II**

Corrosive



Environmental Hazards



Irritant



Oxidizing

Notes

COPPER(II) NITRATE HEMIPENTAHYDRATE Grade: LR
(Cupric Nitrate Hemi-pentahydrate) **Product No: 21551**

M.F.	$\text{Cu}(\text{NO}_3)_2 \cdot 2.5\text{H}_2\text{O}$	
M.W.	232.59	
Description	Hygroscopic Blue Crystals with an Order of Nitric Acid	 Corrosive
Assay (ex Cu)	98.0% Min.	
Chloride (Cl)	0.05% Max.	 Environmental Hazards
Sulphate (SO_4)	0.02% Max.	
Iron (Fe)	0.02% Max.	

CAS No. 19004-19-4
Tariff No. 28342990

UN No. 1477 **Class 5.1** **PG II**  Irritant  Oxidizing

COPPER(II) OXALATE HEMIHYDRATE Grade: PURE
(Cupric Oxalate Hemihydrate) **Product No: 11571**

M.F.	$\text{CuC}_2\text{O}_4 \cdot 0.5\text{H}_2\text{O}$	
M.W.	160.57	
Description	Blue to Bluish Powder	 No GHS
Assay (ex Cu)	98.0% Min.	

CAS No. 814-91-5
Tariff No. 29171190

NON DG

COPPER(II) OXIDE Grade: LR
(Cupric Oxide Black) **Product No: 21507**

M.F.	CuO	
M.W.	79.55	
Description	Black Fine Free Flowing Powder	 Environmental Hazards
Assay (ex Cu)	97.0% Min.	
Chloride (Cl)	0.1% Max.	
Sulphate (SO_4)	0.06% Max.	
Iron (Fe)	0.1% Max.	

CAS No. 1317-38-0
Tariff No. 28255000

UN No. 3077 **Class 9** **PG III**  Irritant

COPPER(II) OXIDE Grade: AR
(Cupric Oxide, Black) **Product No: 31508**

M.F.	CuO	
M.W.	79.55	
Description	Black Fine free flowing Powder	 Environmental Hazards
Assay (ex Cu)	98.0% Min.	
HCl Acid Insoluble Matter	0.02% Max.	
Water Insoluble Matter	0.05% Max.	
Carbon (C)	0.05% Max.	
Chloride (Cl)	0.005% Max.	
Nitrogen (N)	0.005% Max.	
Sulphate (SO_4)	0.02% Max.	
Arsenic (As)	0.0002% Max.	
Calcium (Ca)	0.02% Max.	
Cuprous Oxide (Cu_2O)	0.05% Max.	
Iron (Fe)	0.05% Max.	
Lead (Pb)	0.02% Max.	
Potassium (K)	0.02% Max.	
Sodium (Na)	0.02% Max.	

CAS No. 1317-38-0
Tariff No. 28255000

UN No 3077 **Class 9** **PG III**  Irritant

COPPER(II) OXIDE Grade: ACS
(Cupric Oxide, Black) **Product No: 41509**

M.F.	CuO	
M.W.	79.55	
Description	Black Fine free	 Environmental Hazards
Assay (ex Cu)	99.0% Min.	
Insoluble in Dilute Hydrochloric Acid Matter	0.02% Max.	
Carbon compounds (as C)	0.01% Max.	
Chloride (Cl)	0.005% Max.	
Nitrogen compounds (as N)	0.002% Max.	
Sulfate (SO_4)	0.02% Max.	
Free Alkali	Passes test	
Calcium (Ca)	0.01% Max.	
Iron (Fe)	0.05% Max.	
Potassium (K)	0.02% Max.	
Sodium (Na)	0.05% Max.	

CAS No. 1317-38-0
Tariff No. 28255000

UN No. 3077 **Class 9** **PG III**  Irritant

COPPER(II) OXIDE GRAIN Grade: PURE
(Cupric Oxide, Black, Grain 5-10 mm) **Product No: 11507**

M.F.	CuO	
M.W.	79.55	
Description	Black Granules	 Environmental Hazards
Assay (ex Cu)	99.0% Min.	
Grain Size 5mm - 10 mm average	100% Pass	

CAS No. 1317-38-0
Tariff No. 2825 50 00

UN No. 3077 **Class 9** **PG III**  Irritant

COPPER(II) PERCHLORATE HEXAHYDRATE Grade: PURE
(Cupric Perchlorate Hexahydrate) **Product No: 11545**

M.F.	$\text{Cu}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$	
M.W.	370.53	
Description	Moist Blue, Bluish Green or Green Crystals	 Oxidizing
Assay (ex Cu)	99.0% Min.	

CAS No. 10294-46-9
Tariff No. 28291910

UN No. 1481 **Class 5.1** **PG II**  Irritant

Notes

COPPER(II) PHOSPHATE ANHYDROUS

Grade: PURE

(Cupric Phosphate)**Product No: 115811**

M.F.	$\text{Cu}_3(\text{PO}_4)_2$
M.W.	380.58
Description	Green Powder
Assay (as a Cu)	47.0% - 52.0%



No GHS

CAS No. 7798-23-4**Tariff No. 28352990****NON DG****COPPER(II) SULPHATE ANHYDROUS**

Grade: PURE

(Cupric Sulfate Anhydrous)**Product No: 115811**

M.F.	CuSO_4
M.W.	159.60
Description	White to Light Grey Powder
Assay (ex Cu, On Dry basis)	97.0% Min.
Loss On Drying (300°C, 1 hr)	5.0% Max.



Environmental Hazards

CAS No. 7758-98-7**Tariff No. 28332500****UN No 3077****Class 9****PG III**

Irritant

COPPER(II) SULPHATE ANHYDROUS

Grade: LR

(Cupric Sulfate Anhydrous)**Product No: 215821**

M.F.	CuSO_4
M.W.	159.60
Description	White to Off-White Grey Crystalline Powder
Assay (ex Cu, On Dry basis)	98.0% Min.
Chloride (Cl)	0.05% Max.
Iron (Fe)	0.1% Max.
Loss On Drying (300°C, 1 hr)	2.0% Max.



Environmental Hazards

CAS No. 7758-98-7**Tariff No. 28332500****UN No. 3077****Class 9****PG III**

Irritant

COPPER(II) SULPHATE ANHYDROUS

Grade: AR

Product No: 315831

M.F.	CuSO_4
M.W.	159.60
Description	White to Off-White Grey Crystalline Powder
Assay (ex Cu)	99.0% Min.
Total Nitrogen (N)	0.01% Max.
Chloride (Cl)	0.1% Max.
Calcium (Ca)	0.02% Max.
Magnesium (Mg)	0.05% Max.
Lead (Pb)	0.05% Max.
Zinc (Zn)	0.02% Max.
Iron (Fe)	0.05% Max.
Nickel (Ni)	0.05% Max.
Loss On Drying (300°C, 1 hr)	1.0% Max.



Environmental Hazards

CAS No. 7758-98-7**Tariff No. 28332500****UN No. 3077****Class 9****PG III**

Irritant

COPPER(II) SULPHATE PENTAHYDRATE

Grade: LR

Product No: 21582

M.F.	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
M.W.	249.68
Description	Blue Crystals or Crystalline Powder
Assay (ex Cu)	98.5% Min.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.05% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.



Environmental Hazards

CAS No. 7758-99-8**Tariff No. 28332500****UN No. 3077****Class 9****PG III**

Irritant

COPPER(II) SULPHATE PENTAHYDRATE

Grade: AR

Product No: 31583

M.F.	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
M.W.	249.68
Description	Blue Crystals or Crystalline Powder
Assay (ex Cu)	99.5% Min.
pH 5% Solution	3.8 - 4.5
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.0005% Max.
Nitrogen (N)	0.002% Max.
Arsenic (As)	0.0001% Max.
Calcium (Ca)	0.001% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.001% Max.
Nickel (Ni)	0.002% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.002% Max.



Environmental Hazards

CAS No. 7758-99-8**Tariff No. 28332500****UN No. 3077****Class 9****PG III**

Irritant

COPPER(II) SULPHATE PENTAHYDRATE

Grade: ACS

Product No: 41584

M.F.	$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
M.W.	249.68
Description	Blue Crystals or Crystalline Powder
Assay (ex Cu)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Nitrogen compounds (as N)	0.002% Max.
Calcium (Ca)	0.005% Max.
Iron (Fe)	0.003% Max.
Nickel (Ni)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.02% Max.



Environmental Hazards

CAS No. 7758-99-8**Tariff No. 28332500****UN No. 3077****Class 9****PG III**

Irritant

COPPER(II) SULFIDE

Grade: PURE

(Cupric Sulfide)**Product No: 11586**

M.F.	CuS
M.W.	159.14
Description	Black Fine Powder
Assay (ex Cu)	99.0% Min.



No GHS

CAS No. 1317-40-4**Tariff No. 28309010****NON DG**

Notes

INDIUM

Symbol - In

At.No. 49, At.Wt. 114.81, CAS No. 7440-74-6

INDIUM(III) ACETATE

Grade: PURE

Product No: 12261

M.F. $\text{In}(\text{CH}_3\text{COO})_3$
 M.W. 291.96
 Description White to Off White Powder or Crystals
 Assay (complexo) (ex In) 98.0% Min.



Irritant

CAS No. 251114-58-3

Tariff No. 29152990

NON DG

INDIUM(III) ACETATE (99.999%)

Grade: ULTRA PURE

Product No: 52265

M.F. $\text{In}(\text{CH}_3\text{COO})_3$
 M.W. 291.96
 Description White to Off-White Powder or Crystals
 Assay (complexo)(ex In) 38.3-39.3%
 Total Trace Metals 15 ppm Max.



Irritant

CAS No. 251114-58-3

Tariff No. 29152990

NON DG

INDIUM(III) BROMIDE

Grade: PURE

Product No: 12211

M.F. InBr_3
 M.W. 354.55
 Description White to Off-White Powder or Crystals
 Assay (complexo)(ex In) 98.0% Min.



Irritant

CAS No. 13465-09-3

Tariff No. 29333990

NON DG

INDIUM(III) BROMIDE (99.999%)

Grade: ULTRA PURE

Product No: 12213

M.F. InBr_3
 M.W. 354.55
 Description White to Off-White Powder or Crystals
 Assay(complexo) (ex In) 31.7-33.0%
 Total Trace Metals 15 ppm Max.



Irritant

CAS No. 13465-09-3

Tariff No. 29333990

NON DG

INDIUM(III) CHLORIDE

Grade: PURE

Product No: 12231

M.F. InCl_3
 M.W. 221.18
 Description White to Off-White Powder
 Assay (complexo)(ex In) 98.0% Min.



Corrosive

CAS No. 10025-82-8

Tariff No. 28273990

UN No. 3260

Class 8

PG II



Irritant

INDIUM(III) CHLORIDE (99.999%)

Grade: ULTRA PURE

Product No: 12235

M.F. InCl_3
 M.W. 221.18
 Description White to Off-White Powder
 Assay(complexo)(ex In) 50.8%-53.5%
 Total Trace Metals 15 ppm Max.



Corrosive

CAS No. 10025-82-8

Tariff No. 28273990

UN No. 3260

Class 8

PG II



Irritant

INDIUM(III) FLOURIDE

Grade: PURE

Product No: 12237

M.F. InF_3
 M.W. 171.82
 Description White Powder
 Assay (Complexo)(ex In) 98.0% Min.



Irritant

CAS No. 7783-52-0

Tariff No. 28261990

NON DG

INDIUM(III) FLOURIDE (99.999%)

Grade: ULTRA PURE

Product No: 12240

M.F. InF_3
 M.W. 171.82
 Description White Powder
 Assay (Complexo)(ex In) 65.2%-69.5%
 Total Trace Metals 15 ppm Max.



Irritant

CAS No. 7783-52-0

Tariff No. 28261990

NON DG

INDIUM(III) IODIDE

Grade: PURE

Product No: 12273

M.F. InI_3
 M.W. 495.93
 Description Yellow to Dark Yellow Powder
 or Crystals
 Assay (complexo)(ex In) 98.0% Min.



Health Hazards

CAS No. 13510-35-5

Tariff No. 28276090

NON DG



Irritant

INDIUM(III) IODIDE (99.999%)

Grade: ULTRA PURE

Product No: 12275

M.F. InI_3
 M.W. 495.93
 Description Yellow to Dark Yellow Powder
 or Crystals
 Assay(complexo)(ex In) 22.8%-23.5%
 Total Trace Metals 15 ppm Max.



Health Hazards

CAS No. 13510-35-5

Tariff No. 28276090

NON DG



Irritant

INDIUM(III) NITRATE xH₂O

Grade: PURE

Product No: I1473

M.F. In (NO₃)₃.xH₂O
 M.W. 300.83(Anhydrous basis)
 Description white Powder or Crystals
 Assay(Complexo) (ex In) 98.0% Min.



Oxidizing



Irritant

CAS No. 207398-97-8
 Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

INDIUM(III) NITRATE xH₂O (99.999%)

Grade: ULTRAPURE

Product No: I2255

M.F. In (NO₃)₃.xH₂O
 M.W. 300.83(Anhydrous basis)
 Description white Powder or Crystals
 Assay(Complexo) (as In) 28.0 - 37 %
 Total trace metals 15 ppm Max.



Oxidizing



Irritant

CAS No. 207398-97-8
 Tariff No. 28342990

UN No. 1477

Class 5.1

PG II

INDIUM(III) SULPHATE

Grade: PURE

Product No: I2281

M.F. In₂(SO₄)₃
 M.W. 517.83
 Description White Powder or Crystals
 Assay(Complexo)(ex In) 98.0% Min.



No GHS

CAS No. 13464-82-9
 Tariff No. 28332940

NON DG

INDIUM(III) SULPHATE (99.999%)

Grade: ULTRA PURE

Product No: I2285

M.F. In₂(SO₄)₃
 M.W. 517.83
 Description White Powder or Crystals
 Assay (Complexo)(ex In) 43.1%-44.3%
 Total Trace Metals 15 ppm Max.



No GHS

CAS No. 13464-82-9
 Tariff No. 28332940

NON DG

Notes

LEAD

Symbol - Pb

At.No. 82, At.Wt. 207.20, CAS No. 7439-92-1

LEAD(II) ACETATE TRIHYDRATE

Grade: LR

Product No: 21462

M.F.	$\text{Pb}(\text{CH}_3\text{COO})_2 \cdot 3\text{H}_2\text{O}$
M.W.	379.33
Description	White Crystal or Crystalline Powder
Assay (ex Pb)	99.0% Min.
Chloride (Cl)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.002% Max.

CAS No. 6080-56-4

Tariff No. 29152990

UN No. 1616

Class 6.1

PG III



LEAD(II) ACETATE TRIHYDRATE

Grade: AR

Product No: 31463

M.F.	$\text{Pb}(\text{CH}_3\text{COO})_2 \cdot 3\text{H}_2\text{O}$
M.W.	379.33
Description	White Crystal or Crystalline powder
pH 5% Solution	5.5 - 6.5
Assay (By EDTA Titrn.)	99.5% Min.
Dil. Acetic Acid Insoluble Matter	0.005% Max.
Chloride (Cl)	0.0005% Max.
Nitrogen Compound (N)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.

CAS No. 6080-56-4

Tariff No. 29152990

UN No. 1616

Class 6.1

PG III



LEAD(II) ACETATE TRIHYDRATE

Grade: ACS

Product No: 41464

M.F.	$\text{Pb}(\text{CH}_3\text{COO})_2 \cdot 3\text{H}_2\text{O}$
M.W.	379.33
Description	White Crystals
Assay (By EDTA Titrn.)	99.0% - 103.0%
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.0005% Max.
Nitrate and Nitrite (as NO_3)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.

CAS No. 6080-56-4

Tariff No. 29152990

UN No. 1616

Class 6.1

PG III



LEAD(II) BROMIDE

Grade: PURE

Product No: 11421

M.F.	PbBr_2
M.W.	367.01
Description	White to Off-White Fine Crystalline Powder
Assay (ex Pb)	98.0% Min.
Insoluble Matter (In Acid)	0.05% Max.
Chloride (Cl)	0.01% Max.



CAS No. 10031-22-8

Tariff No. 28275990

UN No. 2291

Class 6.1

PG III



LEAD(II) CARBONATE

Grade: LR

Product No: 21442

M.F.	PbCO_3
M.W.	267.20
Description	Heavy White Solid
Assay (as a Pb)	75.0 % Min.
Chloride (Cl)	0.3% Max.
Copper (Cu)	0.05% Max.
Iron (Fe)	0.05% Max.
Zinc (Zn)	0.05% Max.

CAS No. 598-63-0

Tariff No. 28261990

UN No. 3077

Class 9

PG III



LEAD(II) CARBONATE BASIC

Grade: ACS

Product No: 41444

M.F.	$(\text{PbCO}_3)_2\text{Pb}(\text{OH})_2$ (Basic)
M.W.	775.60
Description	Heavy White Solid
Assay (ex Pb)	99.0% Min.
Insoluble in dilute Acetic Acid	0.02% Max.
Chloride (Cl)	0.002% Max.
Nitrate and Nitrite (as NO_3)	Passes test
Cadmium (Cd)	0.002% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.005% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.003% Max.

CAS No. 1344-36-1

Tariff No. 28261990

UN No. 2291

Class 6.1

PG III



LEAD(II) CHLORIDE ANHYDROUS

Grade: LR

Product No: 21431

M.F.	PbCl_2
M.W.	278.10
Description	A White Granular Powder
Assay (Complexometric)	98.0% Min.
Nitrate (NO_3)	0.05% Max.
Iron (Fe)	0.01% Max.

CAS No. 7758-95-4

Tariff No. 28273990

UN No. 2291

Class 6.1

PG III



Notes

LEAD(II) CHLORIDE ANHYDROUS

Grade: AR

Product No: 21431

M.F.	PbCl ₂
M.W.	278.10
Description	A White Granular Powder
Assay (Complexometric)	99.0% Min.
Insoluble Matter	0.01% Max.
Nitrate (NO ₃)	0.05% Max.
Alkalies & Earth	0.1% Max.
Iron (Fe)	0.002% Max.
Moisture	1.0% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 7758-95-4

Tariff No. 28273990

UN No. 2291

Class 6.1

PG III

LEAD(II) FLUORIDE

Grade: LR

Product No: 21437

M.F.	PbF ₂
M.W.	245.2
Description	White to Off-White Powder
Assay (ex Pb)	99.0% Min.
Acidity	3 ml N% Max.
Chloride (Cl)	0.01% Max.
Silica (SiO ₂)	0.05% Max.
Sulphate (SO ₄)	0.01% Max.
Iron (Fe)	0.002% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 7783-46-2

Tariff No. 28261990

UN No. 2291

Class 6.1

PG III

LEAD(II) IODIDE

Grade: PURE

Product No: 11473

M.F.	PbI ₂
M.W.	461.00
Description	Golden Yellow Crystal or Crystalline Powder
Assay	98.5% Min.

Environmental Hazards



Health Hazards



Irritant

CAS No. 10101-63-0

Tariff No. 28276090

UN No. 2291

Class 6.1

PG III

LEAD(II) NITRATE

Grade: LR

Product No: 21453

M.F.	Pb(NO ₃) ₂
M.W.	331.20
Description	White Crystals
pH 10% Solution	Clear and Colourless
Assay (ex Pb)	99.0% Min.
Chloride (Cl)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.001% Max.

Corrosive



Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10099-74-8

Tariff No. 28342990

UN No. 1469

Class 5.1(6.1)

PG II

LEAD(II) NITRATE

Grade: AR

Product No: 31454

M.F.	Pb(NO ₃) ₂
M.W.	331.20
Description	White Crystals
Assay (ex Pb)	99.5% Min.
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.0005% Max.
Calcium (Ca)	0.002% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.002% Max.

Corrosive



Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10099-74-8

Tariff No. 28342990

UN No. 1469

Class 5.1(6.1)

PG II

LEAD(II) NITRATE

Grade: ACS

Product No: 41455

M.F.	Pb(NO ₃) ₂
M.W.	331.20
Description	White Crystals
Assay (Complexo)	99.0% Min.
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.02% Max.

Corrosive



Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 10099-74-8

Tariff No. 28342990

UN No. 1469

Class 5.1(6.1)

PG II

Notes

LEAD(II) PERCHLORATE TRIHYDRATE

Grade: LR

Product No: 21446

M.F.	$Pb(ClO_4)_2 \cdot 3H_2O$
M.W.	460.14
Appearance	White to Off-White Crystals
pH 5% Solution	3.0 - 5.0
Assay (Complexometry)	98.0% Min.
Iron (Fe)	0.01% Max.
Chloride (Cl)	0.1% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 13453-62-8**Tariff No. 28291990****UN No. 1470****Class 5.1(6.1)****PG II****LEAD(II) PERCHLORATE TRIHYDRATE**

Grade: ACS

Product No: 41446

M.F.	$Pb(ClO_4)_2 \cdot 3H_2O$
M.W.	460.15
Description	White Crystals
pH 5% Solution	3.0 - 5.0
Assay (ex Pb)	97.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.01% Max.
Iron (Fe)	0.001% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 13453-62-8**Tariff No. 28291990****UN No. 1470****Class 5.1(6.1)****PG II****LEAD(II) SULPHATE**

Grade: LR

Product No: 21482

M.F.	$PbSO_4$
M.W.	303.26
Description	White Powder
Assay (as a Pb)	98.0% Min.
Water Soluble Matter	0.1% Max.
Moisture	0.5% Max.
Chloride (Cl)	0.05% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 7446-14-2**Tariff No. 28332990****UN No. 3077****Class 9****PG III****LEAD(II) THIOCYANATE**

Grade: LR

Product No: 21491

M.F.	$Pb(SCN)_2$
M.W.	323.36
Description	Yellow Powder
Assay (ex Pb)	99.0% Max.
Chloride (Cl)	0.5% Max.
Moisture	1.0% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 592-87-0**Tariff No. 28380030****UN No. 2291****Class 6.1****PG III****LEAD(II) SULFIDE**

Grade: LR

Product No: 21486

M.F.	PbS
M.W.	239.27
Description	Grey to Purple Powder
Assay (as a Pb)	82.0% Min.

Environmental Hazards



Health Hazards



Irritant

CAS No. 1314-87-0**Tariff No. 28309000****UN No. 3077****Class 9****PG III**

Notes

LITHIUM

Symbol - Li

At.No. 6.94, At.Wt. 3, CAS No. 7439-93-2

LITHIUM ACETATE ANHYDROUS

Grade: PURE

Product No: 102611

M.F.	LiCOOCH ₃
M.W.	65.98
Description	White Crystalline Powder
Assay (ex Acetate)	98.0% Min.
Moisture	3.0% Max.



No GHS

CAS No. 546-89-4

Tariff No. 29152990

NON DG

LITHIUM ACETATE DIHYDRATE

Grade: LR

Product No: 20262

M.F.	LiCH ₃ COO.2H ₂ O
M.W.	102.02
Description	White Crystals
Assay (ex Acetate)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.01% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.002% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.01% Max.



No GHS

CAS No. 6108-17-4

Tariff No. 29152990

NON DG

LITHIUM ACETATE DIHYDRATE

Grade: AR

Product No: 30263

M.F.	LiCH ₃ COO.2H ₂ O
M.W.	102.02
Description	White Crystal
pH 5% Solution	7.5 - 9.0
Assay (ex Acetate)	99.5% Min.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.002% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.001% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.



No GHS

CAS No. 6108-17-4

Tariff No. 29152990

NON DG

LITHIUM BENZOATE

Grade: LR

Product No: 20228

M.F.	LiC ₆ H ₅ COO
M.W.	128.10
Description	White Powder
Assay	99.0% Min.
Heavy Metal (Pb)	0.002% Max.
Chloride (Cl)	0.005% Max.
Sulfate (SO ₄)	0.2% Max.
Iron (Fe)	0.002% Max.



No GHS

CAS No. 553-54-8

Tariff No. 29163190

NON DG

LITHIUM BROMIDE ANHYDROUS

Grade: LR

Product No: 202121

M.F.	LiBr
M.W.	86.85
Description	White or Pinkish White Granulated Powder
Assay (ex Br)	99.0% Min.
Chloride (Cl)	0.1% Max.
Iodide (I)	0.02% Max.
Sulphate (SO ₄)	0.01% Max.
Barium (Ba)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.001% Max.



No GHS

CAS No. 7550-35-8

Tariff No. 28275990

NON DG

LITHIUM BROMIDE ANHYDROUS

Grade: AR

Product No: 302131

M.F.	LiBr
M.W.	86.85
Description	White or Pinkish White Granulated Powder
Assay (ex Br)	99.0% Min.
Loss on Drying (400°C)	0.5% Max.
Chloride (Cl)	0.05% Max.
Sulphate (SO ₄)	0.005% Max.
Barium (Ba)	0.001% Max.
Calcium (Ca)	0.001% Max.
Cadmium (Cd)	0.0005% Max.
Cobalt (Co)	0.0005% Max.
Chromium (Cr)	0.0005% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Potassium (K)	0.005% Max.
Magnesium (Mg)	0.0005% Max.
Manganese (Mn)	0.0005% Max.
Sodium (Na)	0.005% Max.
Nickel (Ni)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Zinc (Zn)	0.005% Max.



No GHS

CAS No. 7550-35-8

Tariff No. 28275990

NON DG

LITHIUM CARBONATE

Grade: ACS

Product No: 40244

M F	Li ₂ CO ₃
M.W	73.89
Description	White powder
Assay	99.0 % Min.
Insoluble in dilute hydrochloric acid	0.01 % Max
Chloride (Cl)	0.005 % Max
Nitrate (NO ₃)	5 ppm
Sulfur compounds (as SO ₄)	0.2 % Max
Heavy metals (by ICP-OES)	0.002 % Max
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	0.002 % Max
Calcium (Ca)	0.01 % Max
Potassium (K)	0.01 % Max
Sodium (Na)	0.1 % Max



No GHS

CAS No. 554-13-2

Tariff No. 28369990

NON DG

LITHIUM CHLORIDE ANHYDROUS

Grade: LR

Product No: 202321

M.F.	LiCl
M.W.	42.39
Description	A Hygroscopic White Granular Powder
Assay (ex Cl)	98.0% Min.
Loss on Drying at 120°C	2.0% Max.
Sulphate (SO ₄)	0.01% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.2% Max.



No GHS

CAS No. 7447-41-8

Tariff No. 28273990

NON DG

LITHIUM CHLORIDE ANHYDROUS

Grade: AR

Product No: 302331

M.F.	LiCl
M.W.	42.39
Description	A Hygroscopic White Granular Powder
Assay (ex Cl)	99.0% Min. (On Dry Basis)
pH 5% Solution	5.0 - 7.0
Insoluble Matter	0.005% Max.
Loss on drying at 120°C	2.0% Max.
Nitrogen Compounds (N)	0.001% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.02% Max.
Sodium (Na)	0.02% Max.



No GHS

CAS No. 7447-41-8

Tariff No. 28273990

NON DG

LITHIUM CHLORIDE ANHYDROUS

Grade: ACS

Product No: 402341

M.F.	LiCl
M.W.	42.39
Description	A Hygroscopic White Granular Powder
Assay (ex Cl)	99.0% Min.
Insoluble Matter	0.01% Max.
Titrate base (meq/g)	0.008 Max.
Loss on Drying at 105°C	1.0 % Max.
Nitrate (NO ₃)	0.001% Max.
Sulphate (SO ₄)	0.01% Max.
Barium (Ba)	0.003% Max.
Heavy metals (by ICP-OES)	0.002% Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	0.001% Max.
Iron (Fe)	0.01% Max.
Calcium (Ca)	0.01% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.2% Max.



No GHS

CAS No. 7447-41-8

Tariff No. 28273990

NON DG

LITHIUM CHLORIDE MONOHYDRATE

Grade: LR

Product No: 20233

M.F.	LiCl.H ₂ O
M.W.	60.41
Description	A White Crystal or Lumps
Assay (ex Cl)	95.0% Min.
Sulphate (SO ₄)	0.04% Max.



Irritant

Iron (Fe)
Lead (Pb)0.002% Max.
0.001% Max.

CAS No. 85144-11-2

Tariff No. 28273990

NON DG

LITHIUM CHROMATE DIHYDRATE

Grade: LR

Product No: 20222

M.F.	Li ₂ CrO ₄ .2H ₂ O
M.W.	165.92
Description	Yellow or Dark Powder
Assay (ex Cr)	99.0% Min.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.01% Max.
Sulfate (SO ₄)	0.005% Max.
Iron (Fe)	0.002% Max.



Irritant

CAS No. 14307-35-8

Tariff No. 28415090

UN No. 1479

Class 5.1

PG III

LITHIUM DICHROMATE HYDRATE

Grade: LR

Product No: 10222

M.F.	Li ₂ Cr ₂ O ₇
M.W.	229.87
Description	Yellow or Dark Yellow Crystalline Powder
Assay (as Chromium)	38.0% - 41.0%



Health Hazards



Irritant



Oxidizing

CAS No. 52478-50-9

Tariff No. 28415090

NON DG

LITHIUM CITRATE ANHYDROUS

Grade: PURE

(tri-Lithium Citrate Anhydrous)

Product No: 102681

M.F.	Li ₃ C ₆ H ₅ O ₇
M.W.	209.92
Description	White Crystalline Powder
Assay (ion-exchange)	98.0% Min



Irritant

CAS No. 919-16-4

Tariff No. 29181590

NON DG

LITHIUM CITRATE TETRAHYDRATE

Grade: LR

Product No: 20268

(tri-Lithium Citrate Tetrahydrate)

M.F.	Li ₃ C ₆ H ₅ O ₇ .4H ₂ O
M.W.	281.99
Description	White Crystals
Assay	98.5% Min.
Chloride (Cl)	0.05% Max.
Sulphate (SO ₄)	0.02% Max.
Arsenic (As)	0.001% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.03% Max.



Irritant

CAS No. 6080-58-6

Tariff No. 29181590

NON DG

LITHIUM FLOURIDE

Grade: LR

Product No: 20238

M.F.	LiF
M.W.	25.94
Description	White Powder
Assay (ex Li)	98.0% Min.
pH 0.1% Solution	5.0 - 7.0
Silica (SiO ₂)	0.02% Max.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.004% Max.



Toxic

CAS No. 7789-24-4

Tariff No. 28261990

UN No. 3288

Class 6.1

PG III

LITHIUM IODIDE HYDRATE

Grade: LR

(Lithium Iodide Monohydrate)

Product No: 20273 I

M.F.	LiI.H ₂ O
M.W.	151.84
Description	White to Off-White Crystalline Powder
Assay (ex I)	98.0% Min.
Sulfate (SO ₄)	0.05% Max.



No GHS

CAS No. 85017-80-7

Tariff No. 28276090

NON DG

LITHIUM IODIDE TRIHYDRATE

Grade: LR

Product No: 20273

M.F.	LiI.3H ₂ O
M.W.	187.80
Description	White to Off-White Crystalline Powder
Assay (ex Li)	99.0% Min
Bromide & Chloride	0.2% Max.
Sulfate (SO ₄)	0.2% Max.
Lead (Pb)	0.05% Max.



No GHS

CAS No. 7790-22-9

Tariff No. 28276090

NON DG

LITHIUM METABORATE ANHYDROUS

Grade: LR

Product No: 20217M

M.F.	LiBO ₂
M.W.	49.75
Description	White Powder
Assay (ex Li)	99.0% Min.
Loss on melting	2.0% Max.
Chloride (Cl)	0.005% Max.
Fluoride (F)	0.005% Max.
Phosphate (PO ₄)	0.002% Max.
Silicate (SiO ₂)	0.05% Max.
Sulfate (SO ₄)	0.01% Max.



No GHS

CAS No. 13453-69-5

Tariff No. 28401100

NON DG

LITHIUM METABORATE DIHYDRATE

Grade: LR

Product No: 20218M

M.F.	LiBO ₂ .2H ₂ O
M.W.	85.78
Description	White Powder
Assay (ex Li)	99.0% Min.
Chloride (Cl)	0.01% Max.
Lead (Pb)	0.01% Max.



No GHS

CAS No. 15293-74-0

Tariff No. 28401100

NON DG

LITHIUM METABORATE DIHYDRATE

Grade: AR

Product No: 30218M

M.F.	LiBO ₂ .2H ₂ O
M.W.	85.78
Description	White Powder
Assay (ex Li)	99.0% Min.
Insoluble Matter	0.05% Max.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.005% Max.
Aluminium (Al)	0.001% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.001% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Lead (Pb)	0.0005% Max.
Zinc (Zn)	0.0005% Max.



No GHS

CAS No. 15293-74-0

Tariff No. 28401100

NON DG

LITHIUM NITRATE ANHYDROUS

Grade: LR

Product No: 20252 I

M.F.	Li NO ₃
M.W.	68.94
Description	A Hygroscopic White Crystal
Assay (ex Li, ion-exchange)	98.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.01% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.02% Max.



Oxidizing

CAS No. 7790-69-4

Tariff No. 28342990

UN No. 2722

Class 5.1

PG II

LITHIUM OXALATE ANHYDROUS

Grade: PURE

Product No: 10272 I

M.F.	Li ₂ C ₂ O ₄
M.W.	101.90
Description	White Crystal
Assay	97.0% Min.



Irritant

CAS No. 553-91-3

Tariff No. 29171190

UN No. 1759

Class 8

PG II

LITHIUM PERCHLORATE ANHYDROUS

Grade: LR

Product No: 20245 I

M.F.	LiClO ₄
M.W.	106.39
Description	A White to Off White Crystalline Powder or Lumps
Assay (Anhydrous Basis)	98.0% Min.
Chloride (Cl)	0.05% Max.
Sulfate (SO ₄)	0.2% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.05% Max.



Irritant



Oxidizing

CAS No. 7791-03-9

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

LITHIUM SULPHATE MONOHYDRATE

Grade: AR

Product No: 30283

M.F.	$\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$
M.W.	127.95
Description	White Crystalline Powder
pH 5% Solution	5.0 - 8.0
Assay	99.0% Min.
Water Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Nitrogen Compounds (N)	0.002% Max.
Calcium (Ca)	0.002% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0002% Max.
Lead (pb)	0.0002% Max.
Magnesium (Mg)	0.001% Max.
Potassium (K)	0.003% Max.
Sodium (Na)	0.003% Max.



Irritant

CAS No. 10102-25-7

Tariff No. 28332990

NON DG

LITHIUM PERCHLORATE ANHYDROUS

Grade: ULTRA PURE

Product No: 502471

M.F.	LiClO_4
M.W.	106.39
Description	White to Off White Crystalline Powder or Lumps
Assay	99.0% Min. (On Dry Basis)
Water (KF)	1.0 % Max.



Irritant



Oxidizing

CAS No. 7791-03-9

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

LITHIUM PERCHLORATE TRIHYDRATE

Grade: LR

Product No: 20245

M.F.	$\text{LiClO}_4 \cdot 3\text{H}_2\text{O}$
M.W.	160.45
Description	White to Off White Crystalline Powder or Lumps
Assay	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.003% Max.
Iron (Fe)	0.001% Max.



Irritant



Oxidizing

CAS No. 13453-78-6

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

LITHIUM PERCHLORATE TRIHYDRATE

Grade: ACS

Product No: 40246

M.F.	$\text{LiClO}_4 \cdot 3\text{H}_2\text{O}$
M.W.	160.45
Description	White to Off White Crystalline Powder or Lumps
pH 5% Solution	6.0 - 7.5
Assay (Anhydrous Basis)	63.0% - 68.0%
Insoluble Matter at 25°C	0.005% Max.
Chloride (Cl)	0.003% Max.
Sulfate (SO_4)	0.001% Max.
Heavy metals (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



Irritant



Oxidizing

CAS No. 13453-78-6

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

LITHIUM PHOSPHATE ANHYDROUS

Grade: PURE

Product No: 102261

M.F.	Li_3PO_4
M.W.	115.79
Description	White Crystalline Powder.
Assay (ex Li)	99.0% Min.



Irritant

CAS No. 10377-52-3

Tariff No. 28352990

NON DG

LITHIUM PHOSPHATE MONOBASIC

Grade: LR

(Lithium di-Hydrogen Phosphate)

Product No: 20227

M.F.	LiH_2PO_4
M.W.	103.93
Description	White Crystal Or Crystalline Powder
Assay (with NaOH)	98.5% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO_4)	0.05% Max.



Irritant

CAS No. 13453-80-0

Tariff No. 28352990

NON DG

LITHIUM PHOSPHATE MONOBASIC

Grade: AR

(Lithium di-Hydrogen Phosphate)

Product No: 30227

M.F.	LiH_2PO_4
M.W.	103.93
Description	White Crystal Or Crystalline Powder
pH 5% Solution at 25°C	4.0 - 5.0
Assay (with NaOH)	98.5% Min.
Chloride (Cl)	0.0005% Max.
Nitrogen (N)	0.001% Max.
Sulfate (SO_4)	0.001% Max.
Heavy Metals (Pb)	0.001% Max.
Iron (Fe)	0.001% Max.
Water (KF)	2.0% Max.



Irritant

CAS No. 13453-80-0

Tariff No. 28352990

NON DG

LITHIUM SULPHATE ANHYDROUS

Grade: LR

Product No: 202821

M.F.	Li_2SO_4
M.W.	109.94
Description	White Crystals
Assay (ion - exchange)	99.0% Min.
Chloride (Cl)	0.01% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.01% Max.
Loss on Drying (110°C, 1 hr)	1.0% Max.



Irritant

CAS No. 10377-48-7

Tariff No. 28332990

NON DG

LITHIUM SULPHATE MONOHYDRATE

Grade: LR

Product No: 20282

M.F.	$\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$
M.W.	127.95
Description	White Crystalline powder
Assay	99.0% Min.
Chloride (Cl)	0.01% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.003% Max.
Nitrate (NO_3)	0.01% Max.



Irritant

CAS No. 10102-25-7

Tariff No. 28332990

NON DG

LITHIUM PERCHLORATE ANHYDROUS

Grade: ACS

Product No: 40246 I

M.F.	LiClO ₄
M.W.	106.39
Description	White to Off White Crystalline Powder or Lumps
pH 5% Solution at 25°C	6.0 - 7.5
Assay	95.0% Min.
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.003% Max.
Sulfate (SO ₄)	0.001% Max.
Heavy Metal (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



Irritant



Oxidizing

CAS No. 7791-03-9

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

LITHIUM SULPHATE MONOHYDRATE

Grade: ACS

Product No: 40284

M.F.	Li ₂ SO ₄ ·H ₂ O
M.W.	127.95
Description	White Crystalline Powder
Assay	99.0% Min.
Loss on drying at 150°C	13.0% - 15.0 %
Water Insoluble	0.01% Max.
Chloride (Cl)	0.002% Max.
Nitrate (NO ₃)	0.001% Max.
Heavy metals (as a Pb)	0.001% Max.
Iron (Fe)	0.001% Max.
Potassium (K)	0.05% Max.
Sodium (Na)	0.05% Max.



Irritant

CAS No. 10102-25-7

Tariff No. 28332990

NON DG

DI-LITHIUM TETRABORATE ANHYDROUS

Grade: LR

(di-Lithium Tetraborate)

Product No: 20218T

M.F.	Li ₂ B ₄ O ₇
M.W.	169.12
Description	White Powder
Assay (Acidimetric)	98.0% Min.
Iron (Fe)	0.01% Max.
Calcium (Ca)	0.01% Max.
Silicon Dioxide (SiO ₂)	0.03% Max.
Lead (Pb)	0.05% Max.
Loss On Drying (600°C, 1hr)	1.0% Max.
Density	0.2 - 0.6 g/cm ³



Irritant

CAS No. 12007-60-2

Tariff No. 28402090

NON DG

DI-LITHIUM TETRABORATE ANHYDROUS

Grade: AR

(di-Lithium Tetraborate)

Product No: 30219T

M.F.	Li ₂ B ₄ O ₇
M.W.	169.12
Description	White Powder
Assay (Acidimetric)	98.0% Min.
Calcium (Ca)	0.001% Max.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.001% Max.
Potassium (K)	0.005% Max.
Magnesium (Mg)	0.001% Max.
Sodium (Na)	0.005% Max.
Lead (Pb)	0.005% Max.
Phosphate (PO ₄)	0.002% Max.
Sulphate (SO ₄)	0.005% Max.



Irritant

CAS No. 12007-60-2

Tariff No. 28402090

NON DG

LITHIUM TETRABORATE ANHYDROUS

Grade: ACS

Product No: 40219T

M.F.	Li ₂ B ₄ O ₇
M.W.	169.12
Description	White Powder
Assay (Acidimetric)	98.0% - 102.0%
Bulk Density	0.25 g/ml
Insoluble Matter	0.01% Max.
Loss on fusion at 950°C	2.0% Max.
Phosphorus compounds (as PO ₄)	0.004% Max.
Silicon (Si)	0.01% Max.
Aluminum (Al)	0.001% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.001% Max.
Magnesium (Mg)	5ppm Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Heavy metals (as Pb)	0.001% Max.



Irritant

CAS No. 12007-60-2

Tariff No. 28402090

NON DG

Notes

MAGNESIUM

At.No. 12, At.Wt. 24.305, CAS No. 7439-95-4

Symbol - Mg

MAGNESIUM ACETATE ANHYDROUS

Grade: LR

Product No: 206621

M.F.	Mg(CH ₃ COO) ₂
M.W	142.39
Description	Colourless Crystalline Powder
Assay (ex Mg)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.05% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.05% Max.
Loss of Drying (110°C, 1hr)	1.0% Max.



No GHS

CAS No. 142-72-3

Tariff No. 29152920

NON DG

MAGNESIUM ACETATE ANHYDROUS

Grade: AR

Product No: 306631

M.F.	Mg(CH ₃ COO) ₂
M.W	142.39
Description	Colourless Crystalline Powder
Assay (ex Mg)	99.5% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.001% Max.
Ammonia (NH ₄)	0.005% Max.
Barium (Ba)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.0005% Max.
Manganese (Mn)	0.003% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.
Loss of Drying	0.5% Max.



No GHS

CAS No. 142-72-3

Tariff No. 29152920

NON DG

MAGNESIUM ACETATE TETRAHYDRATE

Grade: LR

Product No: 20662

M.F.	Mg(CH ₃ COO) ₂ ·4H ₂ O
M.W	214.45
Description	Colourless Crystalline Aggregate Monoclinic Crystals
pH 5% Solution	99.0% Min.
Assay (ex Mg)	7.0 - 9.0
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.01% Max.
Lead (Pb)	0.002% Max.



No GHS

CAS No. 16674-78-5

Tariff No. 29152920

NON DG

MAGNEISUM ACETATE TETRAHYDRATE

Grade: AR

Product No: 30663

M.F.	Mg(CH ₃ COO) ₂ ·4H ₂ O
M.W	214.45
Description	Colourless Crystalline Aggregate Monoclinic Crystals
pH 5% Solution	7.0 - 9.0
Assay (ex Mg)	99.5% Min.



No GHS

Water Insoluble Matter

0.003% Max.

Chloride (Cl)

0.001% Max.

Sulphate (SO₄)

0.005% Max.

Ammonia (NH₄)

0.002% Max.

Barium (Ba)

0.001% Max.

Calcium (Ca)

0.002% Max.

Copper (Cu)

0.0002% Max.

Iron (Fe)

0.0005% Max.

Lead (Pb)

0.0002% Max.

Manganese (Mn)

0.001% Max.

Potassium (K)

0.001% Max.

Sodium (Na)

0.001% Max.

Zinc (Zn)

0.0005% Max.

CAS No. 16674-78-5

Tariff No. 29152920

NON DG

MAGNEISUM ACETATE TETRAHYDRATE

Grade: ACS

Product No: 40664

M.F.	Mg(CH ₃ COO) ₂ ·4H ₂ O
M.W	214.46
Description	Colourless Crystalline Aggregate Monoclinic crystals
pH 5% Solution	7.0 - 9.0
Assay (ex Mg)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Nitrogen Compounds (as a N)	0.001% Max.
Sulphate (SO ₄)	0.005% Max.
Barium (Ba)	0.001% Max.
Calcium (Ca)	0.01% Max.
Manganese (Mn)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.005% Max.
Heavy metals (as Pb)	5ppm Max.
Iron (Fe)	5ppm Max.



No GHS

CAS No. 16674-78-5

Tariff No. 29152920

NON DG

MAGNESIUM BROMIDE HEXAHYDRATE

Grade: LR

Product No: 20612

M.F.	MgBr ₂ ·6H ₂ O
M.W	292.20
Description	Colourless, very Deliquescent Crystals
Assay (ex Mg)	99.0% Min.
Sulphate (SO ₄)	0.01% Max.
Lead (Pb)	0.002% Max.



Irritant

CAS No. 13446-53-2

Tariff No. 28275910

NON DG

Notes

MAGNESIUM BROMIDE HEXAHYDRATE

Grade: AR

Product No: 30613

M.F	MgBr ₂ ·6H ₂ O
M.W	292.20
Description	Colourless, very Deliquescent Crystals
pH 5% Solution at 25°C	6.5 - 8.0
Assay (ex Mg)	99.0% Min.
Chloride (Cl)	0.05% Max.
Sulfate (SO ₄)	0.02% Max.
Iron (Fe)	0.005% Max.
Cadmium (Cd)	0.005% Max.
Copper (Cu)	0.005% Max.
Lead (Pb)	0.005% Max.
Zinc (Zn)	0.005% Max.



Irritant

CAS No. 13446-53-2

Tariff No. 28275910

NON DG

MAGNESIUM CHLORIDE HEXAHYDRATE

Grade: LR

Product No: 20632

M.F	MgCl ₂ ·6H ₂ O
M.W	203.30
Description	A Hygroscopic Colourless Deliquescent Crystals/Crystalline Powder
Assay (ex Mg)	99.0% Min.
Phosphate (PO ₄)	0.004% Max.
Sulphate (SO ₄)	0.04% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.002% Max.



No GHS

CAS No. 7791-18-6

Tariff No. 28273100

NON DG

MAGNESIUM CHLORIDE HEXAHYDRATE

Grade: AR

Product No: 30633

M.F	MgCl ₂ ·6H ₂ O
M.W	203.30
Description	A Hygroscopic Colourless Deliquescent Crystals
Assay (ex Mg)	99.0% Min.
PH 5% Solution	5 - 6.5
Alcohol Insoluble Matter	Pass the test
Water Insoluble Matter	0.003% Max.
Nitrogen Compounds	0.002% Max.
Phosphate (PO ₄)	0.0002% Max.
Sulphate (SO ₄)	0.002% Max.
Arsenic (As)	0.0001% Max.
Barium (Ba)	0.002% Max.
Calcium (Ca)	0.002% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0002% Max.
Lead (Pb)	0.0002% Max.
Manganese (Mn)	0.0005% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.001% Max.
Strontium (Sr)	0.002% Max.



No GHS

CAS No. 7791-18-6

Tariff No. 28273100

NON DG

MAGNESIUM CHLORIDE HEXAHYDRATE

Grade: ACS

Product No: 40634

M.F	MgCl ₂ ·6H ₂ O
M.W	203.30
Description	A Hygroscopic Colourless Deliquescent Crystals
Assay (ex Mg)	99.0% - 102.0%
Insoluble Matter	0.005 % Max.
Nitrate (NO ₃)	0.001% Max.
Phosphate (PO ₄)	5ppm Max.
Sulphate (SO ₄)	0.002% Max.
Ammonium (NH ₄)	0.002% Max.
Barium (Ba)	0.005% Max.
Calcium (Ca)	0.01% Max.
Manganese (Mn)	5ppm Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.005% Max.
Heavy metals (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



No GHS

CAS No. 7791-18-6

Tariff No. 28273100

NON DG

MAGNESIUM CHROMATE PENTAHYDRATE

Grade: PURE

Product No: 10621

M.F	MgCrO ₄ ·5H ₂ O
M.W	230.30
Description	Yellowish Powder
Assay	99.0% Min.



Corrosive



Toxic

CAS No. 16569-85-0

Tariff No. 28415090

UN No. 2923

Class 8

PG II

MAGNESIUM IODIDE ANHYDROUS

Grade: PURE

Product No: 106731

M.F	MgI ₂
M.W	278.12
Description	Off-White to Yellow Crystalline Powder
Assay (ex Mg)	97.0 % Min.



No GHS

CAS No. 10377-58-9

Tariff No. 228276090

NON DG

MAGNESIUM NITRATE HEXAHYDRATE

Grade: LR

Product No: 20652

M.F	Mg(NO ₃) ₂ ·6H ₂ O
M.W	256.41
Description	White Colourless Crystals
Assay (ex Mg)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.01% Max.
Calcium (Ca)	0.01% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.



No GHS

CAS No. 13446-18-9

Tariff No. 28342920

NON DG

Notes

MAGNESIUM NITRATE HEXAHYDRATE

Grade: AR

Product No: 30653

M.F.	Mg(NO ₃) ₂ ·6H ₂ O
M.W.	256.41
Description	White Colourless Crystals
pH 5% Solution	5.0 - 7.0
Assay (ex Mg)	99.0% Min.
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Phosphate (PO ₄)	0.0005% Max.
Sulphate (SO ₄)	0.002% Max.
Ammonia (NH ₄)	0.002% Max.
Barium (Ba)	0.001% Max.
Calcium (Ca)	0.0002% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0002% Max.
Lead (Pb)	0.0002% Max.
Manganese (Mn)	0.0005% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.001% Max.
Strontium (Sr)	0.002% Max.
Zinc (Zn)	0.0005% Max.



No GHS

CAS No. 13446-18-9

Tariff No. 28342920

NON DG

MAGNESIUM NITRATE HEXAHYDRATE

Grade: ACS

Product No: 40654

M.F.	Mg(NO ₃) ₂ ·6H ₂ O
M.W.	256.41
Description	White Colourless Crystals
PH 5% Solution at 25°C	5.0 - 8.2
Assay (ex Mg)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Phosphate (PO ₄)	5ppm Max.
Sulphate (SO ₄)	0.005% Max.
Ammonia (NH ₄)	0.003% Max.
Barium (Ba)	0.005% Max.
Calcium (Ca)	0.01% Max.
Manganese (Mn)	5ppm Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.005% Max.
Heavy metals (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



No GHS

CAS No. 13446-18-9

Tariff No. 28342920

NON DG

MAGNESIUM PERCHLORATE HEXAHYDRATE

Grade: LR

Product No: 20645

M.F.	Mg(ClO ₄) ₂ ·6H ₂ O
M.W.	331.32
Description	White Crystal
Assay (ex Mg)	99.0% Min.
Chloride (Cl)	0.05% Max.
Sulfate (SO ₄)	0.05% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.05% Max.



Irritant



Oxidizing

CAS No. 13446-19-0

Tariff No. 28291990

UN No. 1475

Class 5.1

PG II

MAGNEISUM PERCHLORATE HYDRATE

Grade: LR

Product No: 20645 I

M.F.	Mg(ClO ₄) ₂ ·XH ₂ O
M.W.	223.23 (Anhydrous basis)
Description	White Crystal or Crystalline Powder



Irritant

Assay (ex Mg, on Dry Basis)

99.0% Min.

Total Water (H₂O)

34.0% Max.

Chloride (Cl)

0.05% Max.

Sulfate (SO₄)

0.05% Max.

Iron (Fe)

0.01% Max.

Lead (Pb)

0.05% Max.

CAS No. 64010-42-0

Tariff No. 28291990

UN No. 1475

Class 5.1

PG II

MAGNESIUM SULPHATE HEPTAHYDRATE

Grade: LR

Product No: 20682

M.F.	MgSO ₄ ·7H ₂ O
M.W.	246.47
Description	White, Colourless Crystals.
Assay (ex Mg)	99% Min.
Chloride (Cl)	0.02% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.0005% Max.
Zinc (Zn)	0.001% Max.



No GHS

CAS No. 10034-99-8

Tariff No. 28332100

NON DG

MAGNESIUM SULPHATE HEPTAHYDRATE

Grade: AR

Product No: 30683

M.F.	MgSO ₄ ·7H ₂ O
M.W.	246.47
Description	White, Colourless Crystals
pH 5% Solution	5.0 - 8.0
Assay (ex Mg)	99.5% Min.
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.0002% Max.
Nitrogen Compounds (N)	0.002% Max.
Arsenic (As)	0.0001% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0001% Max.
Iron (Fe)	0.0001% Max.
Lead (Pb)	0.0001% Max.
Manganese (Mn)	0.0005% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.001% Max.
Zinc (Zn)	0.0005% Max.



Irritant



Oxidizing

CAS No. 10034-99-8

Tariff No. 28332100

NON DG

MAGNESIUM SULPHATE HEPTAHYDRATE

Grade: ACS

Product No: 40684

M.F.	MgSO ₄ ·7H ₂ O
M.W.	246.47
Description	White, Colourless Crystals
pH 5% Solution at 25°C	5.0 - 8.2
Assay (ex Mg)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	5ppm Max.
Nitrate (NO ₃)	0.002% Max.
Ammonium (NH ₄)	0.002% Max.
Calcium (Ca)	0.02% Max.
Manganese (Mn)	5ppm Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Strontium (Sr)	0.005% Max.
Heavy metals (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



Irritant



Oxidizing

CAS No. 10034-99-8

Tariff No. 28332100

NON DG

MANGANESE

At.No. 25, At.Wt. 54.9380, CAS No. 7439-96-5

Symbol - Mn

MANGANESE(II) ACETATE ANHYDROUS

Grade: PURE

Product No: 116611

M.F.	$\text{Mn}(\text{CH}_3\text{COO})_2$
M.W.	173.03
Description	Pink Crystalline Powder
Assay (ex Mn)	95.0% Min.
Moisture	5.0% Max.

CAS No. 638-38-0

Tariff No. 29152930

NON DG



Health Hazards



Irritant

MANGANESE(II) ACETATE TETRAHYDRATE

Grade: LR

Product No: 21662

M.F.	$\text{Mn}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
M.W.	245.09
Description	Pale Red Crystals
Assay (ex Mn)	99.0% Min.
Chloride (Cl)	0.001% Max.
Sulphate (SO_4)	0.005% Max.
Iron (Fe)	0.001% Max.
Heavy metals (Pb)	0.005% Max.

CAS No. 6156-78-1

Tariff No. 29152930

NON DG



Irritant

MANGANESE(II) ACETATE TETRAHYDRATE

Grade: AR

Product No: 31663

M.F.	$\text{Mn}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
M.W.	245.09
Description	Pale Red Crystals
Assay (ex Mn)	99.5% Min.
Calcium (Ca)	0.005% Max.
Chloride (Cl)	0.001% Max.
Heavy Metals (Pb)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Magnesium (Mg)	0.005% Max.
Sodium (Na)	0.002% Max.
Sulphate (SO_4)	0.005% Max.
Zinc (Zn)	0.0005% Max.
KMnO_4 Red Matters (as O)	0.0005% Max.

CAS No. 6156-78-1

Tariff No. 29152930

NON DG



Irritant

MANGANESE BROMIDE ANHYDROUS

Grade: LR

Product No: 116131

M.F.	MnBr_2
M.W.	214.76
Description	Pink Crystalline powder
Assay (Complexo)	99.0 % Min

CAS No. 13446-03-2

Tariff No. 28275990

NON DG



Irritant

MANGANESE(II) BROMIDE TETRAHYDRATE

Grade: LR

Product No: 21612

M.F.	$\text{MnBr}_2 \cdot 4\text{H}_2\text{O}$
M.W.	286.82
Description	Red Crystal
Assay (ex Mn)	98.0% Min.
Acidity	1 ml N% Max.
Sulfate (SO_4)	0.1% Max.
Lead (Pb)	0.002% Max.



Irritant

CAS No. 10031-20-6

Tariff No. 28275990

NON DG

MANGANESE(II) BROMIDE TETRAHYDRATE

Grade: AR

Product No: 31613

M.F.	$\text{MnBr}_2 \cdot 4\text{H}_2\text{O}$
M.W.	286.82
Description	Red Crystal
pH 5% Solution	5.0 - 7.0
Assay (ex Mn)	99.0% Min.
Water Insoluble Matter	0.005% Max.
Sulfate (SO_4)	0.002% Max.
Barium (Ba)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0002% Max.
Chloride (Cl)	0.005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0002% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.005% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.

CAS No. 10031-20-6

Tariff No. 28275990

NON DG



Irritant

MANGANESE(II) CARBONATE

Grade: LR

Product No: 21642

M.F.	MnCO_3
M.W.	114.95
Description	Buff or Brown powder
Assay (as a Mn, Complexometric)	42.0% - 46.0%
Acid Soluble in HCl	0.05% Max.
Chloride (Cl)	0.02% Max.
Sulphate (SO_4)	0.1% Max.
Iron (Fe)	0.01% Max.

CAS No. 598-62-9

Tariff No. 28369990

NON DG



No GHS

MANGANESE(II) CARBONATE

Grade: AR

Product No: 31643

M.F.	MnCO_3
M.W.	114.95
Description	Buff or Brown powder
Assay (as a Mn, Complexometric)	42.0% - 46.0%
Acid soluble in HCl	0.05% Max.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.1% Max.
Iron (Fe)	0.01% Max.
Aluminum (Al)	0.001% Max.
Copper (Cu)	0.001% Max.
Calcium (Ca)	0.001% Max.
Lead (Pb)	0.001% Max.
Magnesium (Mg)	0.001% Max.
Nickel (Ni)	0.001% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.005% Max.

CAS No. 598-62-9

Tariff No. 28369990

NON DG



No GHS

MANGANESE(II) CHLORIDE ANHYDROUS

Grade: LR

Product No: 216321

M.F.	MnCl ₂
M.W.	125.84
Description	Pink Crystalline Powder
Assay (ex Mn)	99.0% Min.
Sulfate (SO ₄)	0.05% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.05% Max.
Moisture	1.0% Max.
-80 Mesh	95.0% Pass

CAS No. 7773-01-5**Tariff No. 28273920****UN No. 3288****Class 6.1****PG III**

Environmental Hazards



Toxic

MANGANESE(II) CHLORIDE DIHYDRATE

Grade: LR

Product No: 11631

M.F.	MnCl ₂ ·2H ₂ O
M.W.	161.87
Description	Rose-Colour Crystalline Powder
Assay (ex Mn)	99.0% Min.
Sulfate (SO ₄)	0.01% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.05% Max.

CAS No. 20603-88-7**Tariff No. 28273920****NON DG**

No GHS

MANGANESE(II) CHLORIDE TETRAHYDRATE

Grade: LR

Product No: 21632

M.F.	MnCl ₂ ·4H ₂ O
M.W.	197.90
Description	Rose-Colour Deliquescent Crystals
Assay (ex Mn)	99.0% Min.
Sulphate (SO ₄)	0.05% Max.
Barium (Ba)	0.05% Max.
Iron (Fe)	0.005 % Max.
Potassium (K)	0.025% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.05% Max.

CAS No. 13446-34-9**Tariff No. 28273920****NON DG**

Irritant

MANGANESE(II) CHLORIDE TETRAHYDRATE

Grade: AR

Product No: 31633

M.F.	MnCl ₂ ·4H ₂ O
M.W.	197.90
Description	Rose-Colour Deliquescent Crystals
pH 5% Solution at 25°C	5.0 - 6.0
Assay (ex Mn)	99.0% Min.
Water Insoluble Matter	0.003 % Max.
Sulphate (SO ₄)	0.002% Max.
Barium (Ba)	0.005% Max.
Calcium (Ca)	0.005% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0002% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.002% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.
Oxidizing Substance	No reaction
Substance Reducing Iodine (I)	0.0065% Max.

CAS No. 13446-34-9**Tariff No. 28273920****NON DG**

Irritant

MANGANESE(II) CHLORIDE TETRAHYDRATE

Grade: ACS

Product No: 41634

M.F.	MnCl ₂ ·4H ₂ O
M.W.	197.90
Description	Rose-Colour Deliquescent Crystals
pH 5% Solution at 25°C	3.5 - 6.0
Assay (ex Mn)	98.0% - 101.0%
Insoluble Matter	0.005% Max.
Sulfate (SO ₄)	0.005% Max.
Heavy metals (as a Pb)	5ppm Max.
Iron (Fe)	5ppm Max.
Calcium (Ca)	0.005% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.005% Max.

CAS No. 13446-34-9**Tariff No. 28273920****NON DG**

Irritant

MANGANESE(II) FLUORIDE ANHYDROUS

Grade: PURE

Product No: 116371

M.F.	MnF ₂
M.W.	92.94
Description	Reddish Pink Crystal
Assay (ex Mn)	98.0% Min.

CAS No. 7782-64-1**Tariff No. 28261990****NON DG**

Irritant

MANGANESE(II) IODIDE ANHYDROUS

Grade: PURE

Product No: 116731

M.F.	MnI ₂
M.W.	308.74
Description	White to Reddish-Pink Crystalline Powder
Assay (ex Mn)	98.0% Min.

CAS No. 7790-33-2**Tariff No. 28276090****NON DG**

Health Hazards

MANGANESE(II) IODIDE TETRAHYDRATE

Grade: PURE

Product No: 11673

M.F.	MnI ₂ ·4H ₂ O
M.W.	380.81
Description	White to Reddish-Pink Crystalline Powder
Assay (ex Mn)	98.0% Min.

CAS No. 13446-37-2**Tariff No. 28276090****NON DG**

Irritant

Notes

MANGANESE(II) OXALATE DIHYDRATE

Grade: LR

Product No: 21672

M.F.	MnC ₂ O ₄ ·2H ₂ O
M.W.	178.99
Description	Pinkish White Powder
Assay (Oxidimetric)	98.0% Min.
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.005% Max.



Irritant

CAS No. 6556-16-7

Tariff No. 29171190

NON DG

MANGANESE(IV) OXIDE

Grade: AR

(Manganese Dioxide)

Product No: 31608

M.F.	MnO ₂
M.W.	86.94
Description	Grey to Black Fine Powder
Assay (By KMnO ₄)	80.0% Min.
Sulphate (SO ₄)	0.1% Max.
Barium (Ba)	0.5% Max.
Calcium (Ca)	1.0% Max.
Iron (Fe)	0.5% Max.
Loss on drying (105°C)	0.3% Max.
-200 Mesh	100% Pass



Irritant

CAS No. 1313-13-9

Tariff No. 28201000

NON DG

MANGANESE(IV) OXIDE 90% , 10 MICRON Grade: ULTRA PURE

(Manganese Dioxide) Suitable for oxidation reaction

Product No: 51609

M.F.	MnO ₂
M.W.	86.94
Description	Grey to Black Fine Powder
Assay (by KMnO ₄ , as a Manganese)	56.8% Min.
Average Particle Size	10 micron Max.



Irritant

CAS No. 1313-13-9

Tariff No. 28201000

NON DG

MANGANESE SESQUIOXIDE

Grade: LR

(Manganese Dioxide)

Product No: 21608

M.F.	Mn ₂ O ₃
M.W.	157.87
Assay (ex Mn)	99% Min
Copper (Cu)	0.05% Max
Iron (Fe)	0.01% Max
Potassium (K)	0.05% Max
Sodium (Na)	0.02% Max.
Sulfate (SO ₄)	0.05% Max
-200 Mesh	100% Pass



Irritant

CAS No. 1317-34-6

Tariff No. 28201000

NON DG

MANGANESE(II, III) OXIDE

Grade: AR

(Manganese Tetroxide)

Product No: 31608I

M.F.	Mn ₃ O ₄
M.W.	228.81
Description	Black Fine Powder
Assay (as a Mn, Compexometric)	68.0% Min.
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.02% Max.
Aluminium (Al)	0.02% Max.
Barium (Ba)	0.01% Max.
Calcium (Cu)	0.05% Max.
Cadmium (Cd)	0.05% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.01% Max.
Silica (Si)	0.01% Max.
Sodium (Na)	0.01% Max.



No GHS

CAS No. 1317-35-7

Tariff No. 28201000

NON DG

MANGANESE(II) PERCHLORATE HEXAHYDRATE Grade: PURE

Product No: 31645

M.F.	Mn(ClO ₄) ₂ ·6H ₂ O
M.W.	361.93
Description	Pink Crystals
Assay (ex Mn)	98.0% Min.



Oxidizing

CAS No. 15364-94-1

Tariff No. 28291990

UN 1481

Class 5.1

PG II

MANGANESE(II) PHOSPHATE HEPTAHYDRATE

Grade: LR

Product No: 11626

M.F.	Mn ₃ (PO ₄) ₂ ·7H ₂ O
M.W.	480.86
Description	White to Off-White Powder
Assay (as a Mn)	33.0% - 35.0%
Chloride (Cl)	0.1% Max.
Sulfate (SO ₄)	0.5% Max.



No GHS

CAS No. 10236-39-2

Tariff No. 28352990

NON DG

MANGANESE(II) PHOSPHATE TRIHYDRATE

Grade: LR

Product No: 21627

M.F.	Mn ₃ (PO ₄) ₂ ·3H ₂ O
M.W.	408.80
Description	White to Light-Brown Powder
Assay (as a Mn)	35.0% Min.
Loss on Drying at 105°C	16.0% Max.



No GHS

CAS No. 39041-31-1

Tariff No. 28352990

UN No. 1481

Class 5.1

PG II

Notes

MANGANESE(II) SULPHATE MONOHYDRATE Grade: LR

Product No: 21682

M.F.	MnSO ₄ ·H ₂ O
M.W.	169.01
Description	Pale, Rose-Red Crystal Powder
Assay (ex Mn)	98.0% Min.
Chloride (Cl)	0.05% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.002% Max.
Zinc (Zn)	0.05% Max.

CAS No. 10034-96-5

Tariff No. 28332940

Environmental



Hazards



Health Hazards

UN 3077

Class 9

PG III

MANGANESE(II) SULPHATE MONOHYDRATE Grade: AR

Product No: 31683

M.F.	MnSO ₄ ·H ₂ O
M.W.	169.01
Description	Pale, Rose-Red Crystal Powder
Assay (ex Mn)	99.0% Min.
pH 5% Solution	3.5 - 5.0
Water Insoluble Matter	0.01% Max.
Chloride (Cl)	0.001% Max.
Calcium (Ca)	0.004% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.004% Max.
Nickel (Ni)	0.002% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.
Oxidizing Substance	No Reaction
Sub Reducing Iodine (I)	0.01% Max.
Sub Reducing Permanganate (O)	0.001% Max.

CAS No. 10034-96-5

Tariff No. 28332940

Environmental



Hazards



Health Hazards

UN 3077

Class 9

PG III

MANGANESE(II) SULPHATE MONOHYDRATE Grade: ACS

Product No: 41684

M.F.	MnSO ₄ ·H ₂ O
M.W.	169.02
Description	Pale, Rose-Red Crystal Powder
Assay	98.0% - 101.0%
Loss on Ignition	10.0% - 12.0%
Substances Reducing Permanganate	Passes test
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.005% Max.
Calcium (Ca)	0.005% Max.
Magnesium (Mg)	0.005% Max.
Nickel (Ni)	0.02% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.
Zinc (Zn)	0.005% Max.
Heavy Metals (as Pb)	0.002% Max.
Iron (Fe)	0.002% Max.

CAS No. 10034-96-5

Tariff No. 28332940

Environmental



Hazards



Health Hazards

UN 3077

Class 9

PG III

Notes

MERCURY

At.No. 47, At.Wt. 107.868, CAS No. 7440-22-4

Symbol - Hg

AMMONIATED MERCURY CHLORIDE

Grade: PURE

Product No: 2112432

M.F.	$\text{Cl}_2\text{H}_6\text{HgN}_2$
M.W.	252.065
Description	White Odourless Powder
Ph 2% Solution	Acetic Acid is Clear & Colourless
Assay	97-100.2% Min.
Mercurous Mercury	Pass to test
Recedue on Ignition	0.01% Max.
Sulfate	0.005% Max.
Other Heavy Metals (as Pb)	0.002% Max.
Iron (Fe)	0.002% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 10124-48-8
Tariff No. 28273990

UN No. 1630

Class 6.1

PG II

MERCURIC ACETATE

Grade: LR

Product No: 22462

M.F.	$\text{C}_4\text{H}_6\text{HgO}_4$
M.W.	318.7
Description	White, Solid, with Odour of Acetic Acid
pH 2% Solution	Soluble in Water, Dil. Nitric Acid & Dil. Acetic Acid
Assay (ex Hg)	98% Min.
Insoluble Matter	0.01% Max.
Nitrate (NO_3)	0.005% Max.
Recedue on Ignition	0.02% Max.
Chloride (Cl)	0.003% Max.
Sulfate (SO_4)	0.005% Max.
Other Heavy Metals (As Pb)	0.002% Max.
Iron (Fe)	0.002% Max.
Mercurous Mercury	0.2% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 1600-27-7
Tariff No. 28521000

UN No. 1629

Class 6.1

PG II

MERCURIC ACETATE

Grade: AR

Product No: 32463

M.F.	$\text{C}_4\text{H}_6\text{HgO}_4$
M.W.	318.7
Description	White, Solid, with Odour of Acetic Acid
Ph 2% Solution	Soluble in Water, Dil. Nitric Acid & Dil. Acetic Acid
Assay (ex Hg)	99% Min.
Insoluble Matter	0.01% Max.
Nitrate (NO_3)	0.005% Max.
Recedue on Ignition	0.02% Max.
Chloride (Cl)	0.002% Max.
Sulfate (SO_4)	0.005% Max.
Other Heavy Metals (As Pb)	0.002% Max.
Iron (Fe)	0.002% Max.
Mercurous Mercury	0.1% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 1600-27-7
Tariff No. 28521000

UN No. 1629

Class 6.1

PG II

MERCURIC BROMIDE

Grade: LR

Product No: 22412

M.F.	HgBr_2
M.W.	360.41
Description	White to Yellowish Powder
Ph 2% Solution	Freely Soluble in Methanol
Assay (ex Hg)	21.9% Min
Recedue on Ignition	0.03% Max.
Iron (Fe)	0.02% Max.
Other Heavy Metals (as Pb)	0.002% Max.
Loss on Drying	0.2% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7789-47-1
Tariff No. 28275990

UN No. 1634

Class 6.1

PG II

MERCURIC BROMIDE

Grade: AR

Product No: 32413

M.F.	HgBr_2
M.W.	360.41
Description	White Powder
pH 2% Solution	Freely Soluble in Methanol
Assay (ex Hg)	99% Min.
Mercury	55% Min.
Bromine	21.9% Min
Recedue on Ignition	0.02% Max.
Nitrate (NO_3)	0.002% Max.
Iron (Fe)	0.02% Max.
Other Heavy Metals (as Pb)	0.002% Max.
Loss on Drying	0.1% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7789-47-1
Tariff No. 28275990

UN No. 1634

Class 6.1

PG II

MERCURIC CHLORIDE

Grade: LR

Product No: 22432

M.F.	HgCl_2
M.W.	271.5
Description	White Powder
Solubility	1 gm gives Clear and Colourless Solution in Distilled water.
Assay (ex Hg)	98% - 99.5% Min.
Recedue on Ignition	0.02% Max.
Iron (Fe)	0.02% Max.
Loss on Drying	0.1% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7487-94-7
Tariff No. 28273920

UN No. 1624

Class 6.1

PG II

Notes

MERCURIC CHLORIDE

Grade: AR

Product No: 32433

M.F.	Cl ₂ Hg
M.W.	271.5
Description	White Powder
Solubility	1 gm gives Clear and Colourless Solution in Distilled water.
Ether Insoluble	1 gm gives clear solution in 30 ml of ether
Assay	99.5% Min.
Mercury	73.4% Min.
Chlorine	26.2% Min.
Recedue on Ignition	0.02% Max.
Iron	0.02% Max.
Loss on Drying	0.1% Max.

CAS No. 7487-94-7
Tariff No. 28273920

UN No. 1624**Class 6.1****PG II**

Environmental Hazards



Health Hazards



Toxic

MERCURIC IODIDE

Grade: LR

Product No: 22473

M.F.	HgI ₂
M.W.	454.40
Description	Red Powder
Solubility	5 gm gives almost Clear Solution in 50 ml of 10% Potassium Iodide Solution
Assay	98% Min.
Mercury	43.2% Min.
Iodine	27.3% Min.
Iron	0.02% Min.
Mercurous Mercury	0.15% Max.

CAS No. 7774-29-0
Tariff No. 28276090

UN No. 1638**Class 6.1****PG II**

Environmental Hazards



Health Hazards



Toxic

MERCURIC IODIDE

Grade: AR

Product No: 32474

M.F.	HgI ₂
M.W.	454.40
Description	Red Powder
Solubility	5 gm gives almost Clear Solution in 50 ml of 10% Potassium Iodide Solution
Assay	99% Min.
Mercury	45% Min.
Iodine	27.5% Min.
Iron	0.002% Min.
Mercurous Mercury	0.01% Max.

CAS No. 7774-29-0
Tariff No. 28276090

UN No. 1638**Class 6.1****PG II**

Environmental Hazards



Health Hazards



Toxic



Irritant

MERCURIC NITRATE

Grade: LR

Product No: 22452

M.F.	H ₂ HgN ₂ O ₇
M.W.	324.60
Description	White to Yellowish White, deliquescent
Solubility	Lumps or Powder
Insoluble Matter	Freely Soluble in dilute Nitric Acid
Assay	98% Min.
Mercury	60.5% Min.
	0.002% Max.

Environmental Hazards



Chloride Ion
 Sulfate
 Nitrogen Compounds (as N)
 Iron

0.001% Max.
 0.02% Max.
 0.5% Max.



Health Hazards

CAS No. 10045-94-0**Tariff No. 28342990****UN No. 3264****Class3****PG II**

Toxic

MERCURIC NITRATE

Grade:AR

Product No: 32453

M.F.	H ₂ HgN ₂ O ₇
M.W.	324.60
Description	White, deliquescent
Solubility	Lumps or Powder
	Freely Soluble in dilute Nitric Acid
Assay	99-102% Min.
Mercury	61% - 63% Max.
Chloride Ion	0.002% Max.
Sulfate Ion	0.001% Max.
Iron	0.01% Max.
Other Heavy Metals (as Pb)	0.002% Max.
Mercurous Mercury	0.2% Max.

Environmental Hazards

**CAS No. 10045-94-0****Tariff No. 28342990****UN No. 3264****Class3****PG II**

Toxic

MERCURIC OXIDE RED

Grade: LR

Product No: 22407R

M.F.	HgO
M.W.	216.59
Description	Red to Orange Microcrystalline Powder
Solubility	1 gm gives Clear and Colourless Solution in 10 ml Hot Dil. Hydrochloric Acid
Insoluble Matter	0.05% Max.
Assay	98% Min.
Mercury	90.7% Min.
Chloride Ion	0.003% Max.
Sulfate	0.001% Max.
Nitrogen Compounds (as N)	0.005% Max.
Iron	0.05% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 21908-53-2**Tariff No. 28259090****UN No. 1641****Class 6.1****PG II****MERCURIC OXIDE RED**

Grade: AR

Product No: 32408R

M.F.	HgO
M.W.	216.59
Description	Red to Orange Microcrystalline Powder
Solubility	1 gm gives Clear and Colourless Solution in 10 ml Hot Dil. Hydrochloric Acid
Assay	99% Min.
Mercury	91.6% Min.
Chloride Ion	0.002% Max.
Sulfate	0.001% Max.
Nitrogen Compounds (as N)	0.002% Max.
Iron	0.05% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 21908-53-2**Tariff No. 28259090****UN No. 1641****Class 6.1****PG II**

MERCURIC OXIDE YELLOW

Grade: LR

Product No: 22407Y

M.F.	HgO
M.W.	216.59
Description	Yellow or Yellow Orange Powder
Solubility	10% Solution in Hot Dil. HCL is Clear
Assay (ex Hg)	98% Min.
Insoluble Matter	0.03% Max.
Residue on Ignition	0.03% Max.
Sulfate (SO ₄)	0.01% Max.
Chloride (Cl)	0.002% Max.
Nitrogen Compounds (as N)	0.005% Max.
Iron (Fe)	0.003% Max.

CAS No. 21908-53-2
Tariff No. 28259090

UN No. 1641

Class 6.1

PG II

Environmental Hazards



Health Hazards



Toxic

MERCURIC OXIDE YELLOW

Grade: AR

Product No: 32408Y

M.F.	HgO
M.W.	216.59
Description	Yellow or Yellow Orange Powder
Solubility	10% Solution in Hot Dil. HCL is Clear
Assay (ex Hg)	99% Min.
Insoluble Matter	0.02% Min.
Residue After Reduction	0.025% Max.
Sulfate (SO ₄)	0.01% Max.
Chloride (Cl)	0.003% Max.
Nitrogen Compounds (as N)	0.005% Max.
Iron (Fe)	0.002% Max.

CAS No. 21908-53-2
Tariff No. 28259090

UN No. 1641

Class 6.1

PG II

Environmental Hazards



Health Hazards



Toxic

MERCURIC SULPHATE

Grade: LR

Product No: 22482

M.F.	HgSO ₄
M.W.	296.65
Description	White Powder, become Yellowish on expose to light and Moist atmosphere
Solubility	10% Solution in Hot Dil. Sulfuric Acid is Clear
Assay (ex Hg)	98% Min.
Chloride (Cl)	0.002% Max.
Iron (Fe)	0.002% Max.
Mercurous Mercury	0.05% Max.

CAS No. 7783-35-9
Tariff No. 28332990

UN No. 1645

Class 6.1

PG II

Environmental Hazards



Health Hazards



Toxic

MERCURIC SULPHATE

Grade: AR

Product No: 32483

M.F.	HgSO ₄
M.W.	296.65
Description	White Powder, become Yellowish on expose to light and Moist atmosphere
Solubility	10% Solution in Hot Dil. Sulfuric Acid is Clear
Assay (ex Hg)	99% Min.
Chloride (Cl)	0.002% Max.
Iron (Fe)	0.002% Max.
Mercurous Mercury	0.02% Max.

CAS No. 7783-35-9
Tariff No. 28332990

UN No. 1641

Class 6.1

PG II

Environmental Hazards



Health Hazards



Toxic

Notes

NICKEL

At.No. 58.93, At.Wt. 28, CAS No. 7440-02-0

Symbol - Ni

NICKEL(II) ACETATE ANHYDROUS

Grade: PURE

Product No: 108611

M.F. $\text{Ni}(\text{CH}_3\text{COO})_2$
 M.W. 176.78
 Description Dual Green Crystalline Powder
 Assay (ex Ni, On Dry basis) 98.0% Min.
 Moisture 5.0% Max.



Environmental Hazards



Toxic

CAS No. 373-02-4
 Tariff No. 29152990

UN No. 3077

Class 9

PG III

NICKEL(II) ACETATE TETRAHYDRATE

Grade: LR

Product No: 20862

M.F. $\text{Ni}(\text{CH}_3\text{COO})_2 \cdot 4\text{H}_2\text{O}$
 M.W. 248.84
 Description Green, Monoclinic Crystals
 Assay (ex Ni) 98.0% Min.
 Chloride (Cl) 0.01% Max.
 Sulphate (SO_4) 0.04% Max.
 Iron (Fe) 0.02% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 6018-89-9
 Tariff No. 29152990

UN No. 3077

Class 9

PG III

NICKEL(II) BORATE HYDRATE

Grade: PURE

Product No: 10817

M.F. $\text{Ni}(\text{BO}_2)_2 \cdot x\text{H}_2\text{O}$
 M.W. 162.33
 Assay (ex Ni) 97.0% Min.



No GHS

CAS No. 51142-85-9
 Tariff No. 28402090

NON DG

NICKEL(II) BROMIDE ANHYDROUS

Grade: PURE

Product No: 108111

M.F. NiBr_2
 M.W. 218.52
 Description Yellow-Brown Crystalline Powder
 Assay (ex Ni) 98.0% Min.



Environmental Hazards



Health Hazards

CAS No. 13462-88-9
 Tariff No. 28275990

UN No. 3077

Class 9

PG III

NICKEL(II) BROMIDE ANHYDROUS

Grade: AR

Product No: 308131

M.F. NiBr_2
 M.W. 218.52
 Description Yellow-Brown to Orange Brown to Brown Powder or Chunks
 Assay (ex Ni) 99.0% Min.
 Sulfate (SO_4) 0.05% Max.
 Iron (Fe) 0.02% Max.
 Cobalt (Co) 0.02% Max.
 Loss on drying (105°C , 1 Hr) 2.5% Max.



Environmental Hazards



Health Hazards

CAS No. 13462-88-9
 Tariff No. 28275990

UN No. 3077

Class 9

PG III

NICKEL(II) CARBONATE ANHYDROUS

Grade: LR

Product No: 208421

M.F. NiCO_3
 M.W. 118.72
 Description Green Powder
 Assay (as a Ni) 43.0% Min.
 Chloride (Cl) 0.1% Max.
 Sulfate (SO_4) 0.5% Max.
 Iron (Fe) 0.04% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 3333-67-3
 Tariff No. 28369990

UN No. 3077

Class 9

PG III

NICKEL(II) HYDROXIDE CARBONATE

Grade: LR

(Nickel(II) Carbonate Basic Hydrate)

Product No: 20842

M.F. $\text{NiCO}_3 \cdot 2\text{Ni}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$
 Description A Green Powder
 Assay (as a Ni) 41.0% - 49.0%
 Chloride (Cl) 0.01% Max.
 Sulphate (SO_4) 0.05% Max.
 Cobalt (Co) 0.3% Max.
 Iron (Fe) 0.01% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 39380-74-0 / 12607-70-4 / 39430-27-8
 Tariff No. 28369990

UN No. 3077

Class 9

PG III

NICKEL(II) HYDROXIDE CARBONATE, (LOW COBALT)

Grade: AR

(Nickel(II) Carbonate Basic Hydrate)

Product No: 30843

M.F. $\text{NiCO}_3 \cdot 2\text{Ni}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$
 Description A Green Powder
 Assay (as a Ni) 41.0% - 49.0%
 Chloride (Cl) 0.005% Max.
 Sulphate (SO_4) 0.005% Max.
 Cobalt (Co) 0.002% Max.
 Iron (Fe) 0.001% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 39380-74-0 / 12607-70-4 / 39430-27-8
 Tariff No. 28369990

UN No. 3077

Class 9

PG III

NICKEL(II) CHLORIDE ANHYDROUS

Grade: PURE

Product No: 108311

M.F. NiCl_2
 M.W. 129.60
 Description A Brown Crystalline Powder
 Assay (ex Ni) 98.0% Min.
 Water (H_2O) 1.0% Max.



Environmental Hazards



Health Hazards



Toxic

CAS No. 7718-54-9
 Tariff No. 28273990

UN No. 3288

Class 6.1

PG III

NICKEL(II) CHLORIDE ANHYDROUS

Grade: ULTRA PURE

Product No: 50835 I

M.F.	NiCl ₂
M.W.	129.60
Description	A Brown Crystalline Powder
Assay (ex Ni)	99.5% Min.
Water (KF)	0.5% Max.
-100 Mesh	100% Pass

Environmental Hazards



Health Hazards



Toxic

CAS No. 7718-54-9
Tariff No. 28273990

UN No. 3288

Class 6.1

PG III

NICKEL(II) CHLORIDE HEXAHYDRATE

Grade: LR

Product No: 20832

M.F.	NiCl ₂ ·6H ₂ O
M.W.	237.69
Description	Green Deliquescent Crystals
Assay (ex Ni)	97.0% Min.
Sulphate (SO ₄)	0.05% Max.
Cobalt (Co)	0.02% Max.
Iron (Fe)	0.02% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7791-20-0
Tariff No. 28273990

UN No. 3288

Class 6.1

PG III

NICKEL(II) CHLORIDE HEXAHYDRATE

Grade: AR

Product No: 30833

M.F.	NiCl ₂ ·6H ₂ O
M.W.	237.69
Description	Green Deliquescent Crystals
Assay (ex Ni)	98.0% Min.
pH 5% Solution	3.5 - 5.5
Water Insoluble Matter	0.005% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.001% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.002% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.001% Max.

Environmental Hazards



Health Hazards



Toxic

CAS No. 7791-20-0
Tariff No. 28273990

UN No. 3288

Class 6.1

PG III

NICKEL(II) CHLORIDE HEXAHYDRATE

Grade: ACS

Product No: 40834

M.F.	NiCl ₂ ·6H ₂ O
M.W.	237.69
Description	Green Deliquescent Crystals
Assay (ex Ni)	97.0% Min.
Insoluble Matter	0.005% Max.
Nitrogen (N)	0.005% Max.
Sulphate (SO ₄)	0.005% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.1% Max.
Copper (Cu)	0.1% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.01% Max.
Manganese (Mn)	0.002% Max.
Potassium (K)	0.01% Max.

Environmental Hazards



Health Hazards



Toxic

Sodium (Na)
Zinc (Zn)0.05% Max.
0.01% Max.CAS No. 7791-20-0
Tariff No. 28273990

UN No. 3288

Class 6.1

PG III

NICKEL CHROMITE

Grade: PURE

Product No: 10823 I

M.F.
M.W.
AssayNiCr₂O₄
226.70
95.0% Min

Environmental Hazards



Health Hazards



Irritant

CAS No. 12018-18-7
Tariff No. 28415090

UN No. 3077

Class 9

PG III

NICKEL(II) CITRATE

Grade: PURE

Product No: 10868

M.F.
M.W.
Description
Assay (as a Ni)
Chloride (Cl)
Sulfate (SO₄)
Iron (Fe)Ni₃(C₆H₅O₇)₂·xH₂O
554.33 (Anhydrous)
Green Crystal
23.0% - 28.0%
0.05% Max.
0.05% Max.
0.05% Max.

Environmental Hazards



Health Hazards

CAS No. 6018-92-4
Tariff No. 29181590

UN No. 3077

Class 9

PG III

NICKEL(II) FLUORIDE TETRA HYDRATE

Grade: LR

Product No: 20838

M.F.
M.W.
Description
Assay (ex Ni)
Loss On Drying 105°C
Chloride (Cl)
Cobalt (Co)
Iron (Fe)NiF₂·4H₂O
168.8
A Yelloish Green Powder
88.0% > Moist
< 12%
0.2% Max.
0.5% Max.
0.1% Max.

Environmental Hazards



Health Hazards

CAS No. 13940-83-5
Tariff No. 28261990

UN No. 3288

Class 6.1

PG III

NICKEL(II) HYDROXIDE

Grade: LR

Product No: 20848

M.F.
M.W.
Description
Assay (as a Ni)
Water Insoluble Matter
Chloride (Cl)
Sulphate (SO₄)Ni(OH)₂
92.72
Apple Green Powder
61.5% - 65.5%
1.0% Max.
0.005% Max.
0.01% Max.

Environmental Hazards



Health Hazards



Irritant

CAS No. 12054-48-7
Tariff No. 28259090

UN No. 3077

Class 9

PG III

NICKEL(II) IODIDE ANHYDROUS

Grade: PURE

Product No: 108731

M.F.	NiI ₂
M.W.	312.50
Description	Silver, Grey, Grey-Brown Or Black Powder
Assay (ex Ni)	98.0% Min.
Loss on Drying	5.0% Max.

CAS No. 13462-90-3**Tariff No. 28276090****UN No. 3260****Class 8****PG II**Environmental
HazardsHealth
Hazards**NICKEL(II) IODIDE HYDRATE**

Grade: PURE

Product No: 10873

M.F.	NiI ₂ .xH ₂ O
M.W.	312.50 (Anhydrous)
Description	Silver, Grey, Grey-Brown Or Black Powder
Assay (as a Ni)	17.0% - 20.0 %

CAS No. 7790-34-3**Tariff No. 28276090****UN No. 3260****Class 8****PG II**

Corrosive

NICKEL(II) NITRATE HEXAHYDRATE

Grade: LR

Product No: 20852

M.F.	Ni(NO ₃) ₂ .6H ₂ O
M.W.	290.79
Description	Green Crystals / Crystalline Powder
Assay (ex Ni)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO ₄)	0.05% Max.
Cobalt (Co)	0.1% Max.
Iron (Fe)	0.02% Max.

CAS No. 13478-00-7**Tariff No. 28342990****UN No. 2725****Class 5.1****PG III**

Corrosive

Environmental
HazardsHealth
Hazards

Irritant



Oxidizing

NICKEL(II) NITRATE HEXAHYDRATE

Grade: AR

Product No: 30853

M.F.	Ni(NO ₃) ₂ .6H ₂ O
M.W.	290.79
Description	Green Crystals / Crystalline Powder
Assay (ex Ni)	99.0% Min.
pH 5% Solution	4.0 - 6.0
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO ₄)	0.005% Max.
Ammonium (NH ₄)	0.05% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.005% Max.
Copper (Cu)	0.001% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.001% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.001% Max.



Corrosive

Environmental
HazardsHealth
Hazards

Irritant

CAS No. 13478-00-7**Tariff No. 28342990****UN No. 2725****Class 5.1****PG-II**

Oxidizing

NICKEL(II) NITRATE HEXAHYDRATE

Grade: ACS

Product No: 40854

M.F.	Ni(NO ₃) ₂ .6H ₂ O
M.W.	290.81
Description	Green Crystals
Assay (ex Ni)	98.0% - 102.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.002% Max.
Sulphate (SO ₄)	0.002% Max.
Calcium (Ca)	0.01% Max.
Cobalt (Co)	0.1% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.001% Max.
Manganese (Mn)	0.002% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.005% Max.
Zinc (Zn)	0.01% Max.



Corrosive

Environmental
HazardsHealth
Hazards

Irritant



Oxidizing

CAS No. 13478-00-7**Tariff No. 28342990****UN No. 2725****Class 5.1****PG II****NICKEL(II) OXALATE DIHYDRATE**

Grade: LR

Product No: 20872

M.F.	NiC ₂ O ₄ .2H ₂ O
M.W.	182.76
Description	A Green Powder
Assay (ex Ni)	97.0% Min.
Chloride (Cl)	0.1% Max.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.01% Max.
Sulfate (SO ₄)	0.1% Max.

CAS No. 6018-94-6**Tariff No. 29171190****NON DG**

No GHS

NICKEL(II) OXIDE BLACK

Grade: LR

Product No: 20808

M.F.	NiO
M.W.	74.69
Description	Brownish Black or Greenish Black Fine Powder
Assay (as a Ni, Complexometric)	70.0% Min.
Chloride (Cl)	0.003% Max.
Sulfate (SO ₄)	0.05% Max.
Iron (Fe)	10.05% Max.
Cobalt (Co)	0.03% Max.
Zinc (Zn)	0.05% Max.
-250 mesh	100% Pass

CAS No. 1314-06-3**Tariff No. 28254000****NON DG**

No GHS

Notes

NICKEL(II) OXIDE BLACK

Grade: AR

Product No: 30809

M.F.	NiO
M.W.	74.69
Description	Black Powder
Assay (as a Ni, Complexometric)	76.0% Min.
Cadmium (Cd)	0.0001% Max.
Calcium (Ca)	0.01% Max.
Copper (Cu)	0.0006% Max.
Chromium (Cr)	0.0002% Max.
Cobalt (Co)	0.0015% Max.
Iron (Fe)	0.0002% Max.
Magnesium (Mg)	0.002% Max.
Manganese (Mn)	0.0002% Max.
Sodium (Na)	0.05% Max.
Sulphur (S)	0.02% Max.
Zinc (Zn)	0.0003% Max.
-325 Mesh	100% Pass



No GHS

CAS No. 1314-06-3

Tariff No. 28254000

NON DG

NICKEL(II) OXIDE GREEN

Grade: LR

Product No: 20808G

M.F.	NiO
M.W.	74.79
Description	Green Powder
Assay Complexometry	96.0%Min
Cobalt (Co)	0.025%Max
Copper (Cu)	0.0005%Max
Calcium (Ca)	0.003%Max
Iron (Fe)	0.005 % Max
Magnesium (Mg)	0.01%Max
Manganese (Mn)	0.001% Max



Health Hazards



Irritant

CAS No. 1313-99-1

Tariff No. 28254000

NON DG

NICKEL(II) PERCHLORIDE HEXAHYDRATE

Grade: PURE

Product No: 10845

M.F.	Ni(ClO ₄) ₂ .6H ₂ O
M.W.	365.68
Description	Green Crystal
Assay (as a Ni)	13.0% Min



Corrosive



Environmental Hazards



Health Hazards

CAS No. 13520-61-1

Tariff No. 28299010

UN No. 1418

Class 5.1

PG II

NICKEL(II) PERCHLORIDE HEXAHYDRATE

Grade: AR

Product No: 30845

M.F.	Ni(ClO ₄) ₂ .6H ₂ O
M.W.	365.68
Description	Green Crystals
Assay (as a Ni)	15.0% - 17.0%
pH 5% Solution	1.0 - 5.0
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.005% Max.



Corrosive



Environmental Hazards



Health Hazards

CAS No. 13520-61-1

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II

NICKEL(II) PHOSPHATE HYDRATE

Grade: PURE

Product No: 10826

M.F.	Ni ₃ (PO ₄) ₂ .XH ₂ O
M.W.	366.01
Description	Green Powder
Assay (ex Ni)	98.0% Min.



Environmental Hazards



Health Hazards

CAS No. 27176-17-6

Tariff No. 28352990

UN No. 3077

Class 9

PG III

NICKEL(II) SULPHAMATE TETRAHYDRATE

Grade: LR

Product No: 20888

M.F.	Ni(SO ₃ NH ₂) ₂ .4H ₂ O
M.W.	322.93
Description	Green Crystals
Assay	98.0% Min.
Chloride (Cl)	0.01% Max.
Cobalt (Co)	0.5% Max.
Iron (Fe)	0.02% Max.
Lead (Pb)	0.005 % Max.



Environmental Hazards



Health Hazards

CAS No. 124594-15-6

Tariff No. 28429090

UN No. 3077

Class 9

PG III

NICKEL(II) SULPHATE ANHYDROUS

Grade: LR

Product No: 20882I

M.F.	NiSO ₄
M.W.	154.76
Description	Yellow to Yellow-Green Crystalline Powder
Assay (as a Ni)	37.1% - 38.7%
Loss of Drying	5.0% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 7786-81-4

Tariff No. 28332400

UN No. 3077

Class 9

PG III

NICKEL(II) SULPHATE HEPTAHYDRATE

Grade: LR

Product No: 20882

M.F.	NiSO ₄ .7H ₂ O
M.W.	280.85
Description	Green Crystals
Assay (as a Ni)	20.8% - 22.4%
Chloride (Cl)	0.01% Max.
Cobalt (Co)	0.5% Max.
Iron (Fe)	0.02% Max.
Lead (Pb)	0.04% Max.
Alkalis (as Na)	0.1% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 10101-97-0

Tariff No. 28332400

UN No 3077

Class 9

PG III

Notes

NICKEL(II) SULPHATE HEPTAHYDRATE

Grade: AR

Product No: 30883

M.F.	$\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$
M.W.	280.85
Description	Green Crystals
Assay (Ni)	99.0% Min.
pH 5% Solution	4.0 - 6.0
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Nitrogen Compound (N)	0.001% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.002% Max.
Copper (Cu)	0.002% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.001% Max.
Sodium (Na)	0.01% Max.
Zinc (Zn)	0.002% Max.
Alkalis (as Na)	0.002% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 10101-97-0

Tariff No. 28332400

UN No. 3077

Class 9

PG III

NICKEL(II) SULPHATE HEXAHYDRATE

Grade: ACS

Product No: 40884

M.F.	$\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$
M.W.	262.85
Description	Green Crystals
Assay	98.0% - 102%
Insoluble Matter	0.005% Max.
Chloride (Cl)	0.001% Max.
Nitrogen Compound (N)	0.002% Max.
Calcium (Ca)	0.005% Max.
Cobalt (Co)	0.002% Max.
Copper (Cu)	0.005% Max.
Iron (Fe)	0.001% Max.
Magnesium (Mg)	0.005% Max.
Manganese (Mn)	0.002% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.



Environmental Hazards



Health Hazards



Irritant

CAS No. 10101-97-0

Tariff No. 28332400

UN No. 3077

Class 9

PG III

Notes

STRONTIUM

Symbol - Sr

At.No. 38, At.Wt. 87.62, CAS No. 7440-24-6

STRONTIUM ACETATE ANHYDROUS

Grade: LR

Product No: 205621

M.F.	$\text{Sr}(\text{CH}_3\text{COO})_2$
M.W.	205.71
Description	White Crystalline Powder
Assay (as a Sr)	40.0% - 41.5%
Water (KF)	5.0% Max.



No GHS

CAS No. 543-94-2

Tariff No. 29152990

NON DG

STRONTIUM ACETATE HEMIHYDRATE

Grade: LR

Product No: 20562

M.F.	$\text{Sr}(\text{CH}_3\text{COO})_2 \cdot 0.5\text{H}_2\text{O}$
M.W.	214.72
Description	White Crystalline Powder
Assay (ex Sr)	98.0% Min.
pH 10% Solution	6.5 - 8.5
Chloride (Cl)	0.01% Max.
Sulphate (SO_4)	0.05% Max.
Iron (Fe)	0.002% Max.
Potassium (K)	0.05% Max.
Sodium (Na)	0.1% Max.



No GHS

CAS No. 14692-29-6

Tariff No. 29152990

NON DG

STRONTIUM BROMIDE ANHYDROUS

Grade: PURE

Product No: 105111

M.F.	SrBr_2
M.W.	247.44
Description	White Crystalline Powder
Assay (ex Sr)	99.0% Min.
Chloride (Cl)	0.05% Max.
Barium (Ba)	0.1% Max.



Irritant

CAS No. 10476-81-0

Tariff No. 28275990

NON DG

STRONTIUM BROMIDE HEXAHYDRATE

Grade: LR

Product No: 20512

M.F.	$\text{SrBr}_2 \cdot 6\text{H}_2\text{O}$
M.W.	355.53
Description	White Hygroscopic Crystals or Crystalline Powder
Assay (ex Br)	99.0% Min.
Chloride (Cl)	0.2% Max.
Sulfate (SO_4)	0.05% Max.
Lead (Pb)	0.05% Max.
Iron (Fe)	0.02% Max.



Irritant

CAS No. 7789-53-9

Tariff No. 28275990

NON DG

STRONTIUM BROMIDE HEXAHYDRATE

Grade: AR

Product No: 30513

M.F.	$\text{SrBr}_2 \cdot 6\text{H}_2\text{O}$
M.W.	355.53
Description	White Hygroscopic Crystals or Crystalline Powder



Irritant

pH 5% Solution

6.5 - 7.5

Assay (ex Br)

99.0% Min.

Chloride (Cl)

0.1% Max.

Sulfide (S)

0.001% Max.

Bromate (BrO_3)

0.001% Max.

Iodide (I)

0.02% Max.

Lead (Pb)

0.001% Max.

Arsenic (As)

0.0002% Max.

Barium (Ba)

0.01% Max.

Calcium (Ca)

0.1% Max.

Iron (Fe)

0.0005% Max.

CAS No. 7789-53-9

Tariff No. 28275990

NON DG

STRONTIUM BROMIDE HEXAHYDRATE

Grade: ACS

Product No: 40515

M.F.	$\text{SrBr}_2 \cdot 6\text{H}_2\text{O}$
M.W.	355.53
Description	White Hygroscopic Crystals or Crystalline Powder
Assay (Argenometric)	99.0% Min.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.2% Max.
Sulfide (S)	0.005% Max.
Barium (Ba)	0.5% Max.
Lead (Pb)	0.002% Max.
Iron (Fe)	0.002% Max.



Irritant

CAS No. 7789-53-9

Tariff No. 28275990

NON DG

STRONTIUM CARBONATE

Grade: LR

Product No: 20542

M.F.	SrCO_3
M.W.	147.63
Description	Milky White Free Flowing Powder
Assay (Acidimetric)	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Iron (Fe)	0.002% Max.



No GHS

CAS No. 1633-05-2

Tariff No. 28369200

NON DG

STRONTIUM CARBONATE

Grade: AR

Product No: 30543

M.F.	SrCO_3
M.W.	147.64
Description	A White Fine Powder
Assay (Acidimetric)	99.5% Min.
Nitrate (NO_3)	0.5% Min.
Barium (Ba)	0.1% Max.
Calcium (Ca)	0.05% Max.
Chromium (Cr)	0.01% Max.
Copper (Cu)	0.0005% Max.
Magnesium (Mg)	0.01% Max.
Silicon (Si)	0.001% Max.



No GHS

CAS No. 1633-05-2

Tariff No. 28369200

NON DG

STRONTIUM CHLORIDE ANHYDROUS

Grade: LR

Product No: 20531 I

M.F.	SrCl ₂
M.W.	158.53
Description	White Crystalline Powder
Assay (ex Sr)	99.0% Min.
Sulphate (SO ₄)	0.05% Max.
Iron (Fe)	0.01% Max.
- 40 mesh	100% Pass



Corrosive



Irritant

CAS No. 10476-85-4

Tariff No. 28273930

NON DG

STRONTIUM CHLORIDE HEXAHYDRATE

Grade: LR

Product No: 20532

M.F.	SrCl ₂ .6H ₂ O
M.W.	266.62
Description	White Crystalline Needleless
Assay (ex Cl)	99.0% Min.
Nitrate (NO ₃)	0.005% Max.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.002% Max.



Corrosive

CAS No. 10025-70-4

Tariff No. 28273930

NON DG

STRONTIUM CHLORIDE HEXAHYDRATE

Grade: AR

Product No: 30533

M.F.	SrCl ₂ .6H ₂ O
M.W.	266.62
Description	White Crystalline Needleless
pH 5% solution at 25°C	5.0 - 7.0
Assay	99.0% Min.
Water Insoluble Matter	0.003% Max.
Sulfate (SO ₄)	0.001% Max.
Barium (Ba)	0.1% Max.
Calcium (Ca)	0.05% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0002% Max.
Magnesium (Mg)	0.0002% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.001% Max.



Corrosive

CAS No. 10025-70-4

Tariff No. 28273930

NON DG

STRONTIUM CHLORIDE HEXAHYDRATE

Grade: ACS

Product No: 40534

M.F.	SrCl ₂ .6H ₂ O
M.W.	266.62
Description	White Crystalline Needleless
pH 5% solution at 25°C	5.0 - 7.0
Assay	99.0% - 103.0%
Insoluble Matter	0.005% Max.
Sulfate (SO ₄)	0.001% Max.
Barium (Ba)	0.05% Max.
Calcium (Ca)	0.05% Max.
Magnesium (Mg)	0.0002% Max.
Heavy metals (by ICP-OES)	0.005% Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	0.001% Max.



Corrosive

CAS No. 10025-70-4

Tariff No. 28273930

NON DG

STRONTIUM CHROMATE

Grade: LR

Product No: 20522

M.F.	SrCrO ₄
M.W.	203.61
Description	Yellow Powder
Assay	95.0% Min.
Chloride (Cl)	0.1% Max.
Sulfate (SO ₄)	0.02% Max.
Nitrate (NO ₃)	0.2% Max.



Environmental Hazards



Health Hazards



Irritant



Oxidizing

CAS No. 7789-06-2

Tariff No. 28419000

UN NO. 3087

Class 5.1

PG III

STRONTIUM CITRATE di-BASIC ANHYDROUS

Grade: LR

Product No: 20568

M.F.	SrC ₆ H ₅ O ₇
M.W.	277.75
Description	White Crystalline Powder
Assay	97.0% Min.
Lead (Pb)	0.0001% Max.
Chloride (Cl)	0.002% Max.
Sulfate (SO ₄)	0.05% Max.



No GHS

CAS No. 813-97-8

Tariff No. 29181590

NON DG

STRONTIUM FLUORIDE

Grade: PURE

Product No: 10537

M.F.	SrF ₂
M.W.	125.62
Description	A White Powder
Assay	95.0% Min.



Irritant

CAS No. 7783-48-4

Tariff No. 28269000

NON DG

STRONTIUM FLUORIDE

Grade: LR

Product No: 20538

M.F.	SrF ₂
M.W.	125.62
Description	A White Powder
Assay	97.0% Min.
Acidity	20 ml N%
Chloride (Cl)	0.01% Max.
Sulphate (SO ₄)	0.02% Max.
Iron (Fe)	0.01% Max.



Irritant

CAS No. 7783-48-4

Tariff No. 28269000

NON DG

STRONTIUM IODIDE ANHYDROUS

Grade: LR

Product No: 20574 I

M.F.	SrI ₂
M.W.	341.43
Description	White/Cream to Yellow/brown Crystalline Powder, extremely Deliquescent; Photosensitive
Assay	97.0% Min.



Corrosive

CAS No. 10476-86-5

Tariff No. 28276090

UN No. 3260

Class:8

PG II

STRONTIUM IODIDE HEXAHYDRATE

Grade: LR

Product No: 20574

M.F.	$\text{SrI}_2 \cdot 6\text{H}_2\text{O}$
M.W.	449.53
Description	White to Off White (Yellowish) Crystals
Assay (ex I)	99.0 % Min.
Water Insoluble Matter	0.01 % Max.
Chloride & Bromide	0.05 % Max.

CAS No. 7790-40-1

Tariff No. 28276090

UN No. 3260

Class:8

PG II



Corrosive

STRONTIUM NITRATE ANHYDROUS

Grade: LR

Product No: 20552

M.F.	$\text{Sr}(\text{NO}_3)_2$
M.W.	211.63
Description	White Crystalline Powder
Assay	99.0% Min.
Chloride (Cl)	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Barium (Ba)	1.0% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.005% Max.
Potassium (K)	0.05% Max.
Sodium (Na)	0.05% Max.

CAS No. 10042-76-9

Tariff No. 28342910

UN No. 1507

Class 5.1

PG III



Irritant



Oxidizing

STRONTIUM NITRATE ANHYDROUS

Grade: AR

Product No: 30553

M.F.	$\text{Sr}(\text{NO}_3)_2$
M.W.	211.63
Description	White Crystalline Powder
pH 5% Solution	5.0 - 7.0
Assay	99.0% Min.
Water Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulphate (SO_4)	0.001% Max.
Barium (Ba)	0.5% Max.
Calcium (Ca)	0.05% Max.
Copper (Cu)	0.0002% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0002% Max.
Magnesium (Mg)	0.001% Max.
Potassium (K)	0.005% Max.
Sodium (Na)	0.005% Max.

CAS No. 10042-76-9

Tariff No. 28342910

UN No. 1507

Class 5.1

PG III



Irritant



Oxidizing

STRONTIUM NITRATE

Grade: ACS

Product No: 40534

M.F.	$\text{Sr}(\text{NO}_3)_2$
M.W.	211.63
Description	White Crystalline Powder
pH 5% solution at 25°C	5.0 - 7.0
Assay	99.0 % Min.
Insoluble Matter	0.01 % Max.
Loss on drying 105°C	0.1 % Max.
Chloride (Cl)	0.002 % Max.
Sulfate (SO_4)	0.005 % Max.
Barium (Ba)	0.05 % Max.
Calcium (Ca)	0.05 % Max.
Magnesium (Mg)	0.10 % Max.
Sodium (Na)	0.10 % Max.
Heavy metals (by ICP-OES)	5ppm Max.
[Ag, As, Bi, Cd, Cu, Hg, Mo, Pb, Sb, Sn]	
Iron (Fe)	5ppm Max.



Irritant



Oxidizing

CAS No. 10042-76-9

Tariff 28342990

UN No. 1507

Class 5.1

PG III

STRONTIUM OXALATE MONOHYDRATE

Grade: PURE

Product No: 10571

M.F.	$\text{SrC}_2\text{O}_4 \cdot \text{H}_2\text{O}$
M.W.	193.64
Description	White Powder
Assay (ex Sr)	98.0% Min.
-120 Mesh	100% Pass

CAS No. 6160-36-7

Tariff No. 29171130

NON DG



No GHS

STRONTIUM PERCHLORATE HEXAHYDRATE

Grade: LR

Product No: 20545 I

M.F.	$\text{Sr}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$
M.W.	394.63
Description	White to Off-White Crystalline Powder
Assay (ex Sr)	99.0% Min.
Chloride (Cl)	0.01% Max.
Sulfate (SO_4)	0.01% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.001% Max.

CAS No. 13450-97-0

Tariff No. 28291990

UN No. 1508

Class 5.1

PG II



Irritant



Oxidizing

STRONTIUM PERCHLORATE TRIHYDRATE

Grade: LR

Product No: 10545

M.F.	$\text{Sr}(\text{ClO}_4)_2 \cdot 3\text{H}_2\text{O}$
M.W.	340.57
Description	White to Off-White Crystalline Powder
Assay (as a Sr)	25.0% - 26.5%
Chloride (Cl)	0.01% Max.
Sulfate (SO_4)	0.01% Max.
Iron (Fe)	0.005% Max.
Lead (Pb)	0.001% Max.

CAS No. 15650-09-6

Tariff No. 28291990

UN No. 1508

Class 5.1

PG II



Irritant



Oxidizing

STRONTIUM SULPHATE

Grade: LR

Product No: 20582

M.F.	SrSO_4
M.W.	183.68
Description	Milky White Powder
Assay (as a Sr)	98.5% Min.
Loss on ignition at 100°C	1.0% Max.
Iron (Fe)	0.003% Max.

CAS No. 7759-02-6

Tariff No. 28332950

NON DG



No GHS

Notes

TIN

At.No. 50, At.Wt. 118.71, CAS No. 7440-31-5

Symbol - Sn

TIN(II) CHLORIDE DIHYDRATE

Grade: LR

(Stannous Chloride Dihydrate)

Product No: 20732

M F	SnCl ₂ ·2H ₂ O
M.W	225.63
Description	Colourless White Crystal
Assay	97.0% Min.
Sulphate (SO ₄)	0.02% Max.
Heavy Metal (Pb)	0.02% Max.
Iron (Fe)	0.02% Max.



Corrosive



Irritant

CAS No. 10025-69-1

Tariff No. 28273990

UN No. 3260

Class 8

PG III

TIN(II) CHLORIDE DIHYDRATE

Grade: AR

(Stannous Chloride Dihydrate)

Product No: 30733

M F	SnCl ₂ ·2H ₂ O
M.W	225.63
Description	Colourless Crystals/Crystalline Powder
Solubility	4% Solution in Warm Dilute HCl and Water is Clear and Colourless
Assay	97.0% Min.
Insoluble Matter	0.01% Max.
Sulphate (SO ₄)	0.005% Max.
Ammonium (NH ₄)	0.003% Max.
Arsenic (As)	0.0002% Max.
Calcium (Ca)	0.005% Max.
Iron (Fe)	0.0025% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.005% Max.



Corrosive



Irritant

CAS No. 10025-69-1

Tariff No. 28273990

UN No. 3260

Class 8

PG III

TIN(II) CHLORIDE DIHYDRATE

Grade: ACS

(Stannous Chloride Dihydrate)

Product No: 40734

M F	SnCl ₂ ·2H ₂ O
M.W	225.63
Description	Colourless Crystals/Crystalline Powder
Solubility	4% Solution in Warm Dilute HCl and Water is Clear and Colourless
Assay	97.0% Min.
Insoluble Matter	0.01% Max.
Sulphate (SO ₄)	0.005% Max.
Ammonium (NH ₄)	0.003% Max.
Arsenic (As)	0.0002% Max.
Calcium (Ca)	0.005% Max.
Iron (Fe)	0.0025% Max.
Lead (Pb)	0.005% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.002% Max.
Sodium (Na)	0.005% Max.



Corrosive



Irritant

CAS No. 10025-69-1

Tariff No. 28273990

UN No. 3260

Class 8

PG III

TIN(IV) CHLORIDE PENTAHYDRATE

Grade: LR

(Stannic Chloride Pentahydrate)

Product No: 20732(IV)

M F	SnCl ₄ ·5H ₂ O
M.W	350.60
Description	White to Off-White Small Lumps
Assay	98.0% Min.
Arsenic	0.001% Max.
Iron (Fe)	0.0005% Max.
Sulphate (SO ₄)	0.02% Max.
Heavy Metal (Pb)	0.005% Max.



Corrosive

CAS No. 10026-06-9

Tariff No. 28273990

UN No. 2440

Class 8

PG III

TIN(II) SULPHATE

Grade: PURE

(Stannous Sulfate)

Product No: 10781

M F	SnSO ₄
M.W	214.75
Description	White Crystals
Assay (as a Sn)	51.0% - 53.0%



No GHS

CAS No. 7488-55-3

Tariff No. 28332990

NON DG

Notes

ZINC

Symbol - Zn

At.No. 30, At.Wt. 65.38, CAS No. 7440-66-6

ZINC ACETATE ANHYDROUS

Grade: LR

Product No: 220621

M.F.	$\text{Zn}(\text{CH}_3\text{COO})_2$
M.W.	183.45
Description	White Crystalline Powder
Assay (ex Zn, Metal Basis)	98.0% Min.
Sulphate (SO_4)	0.01% Max.
Arsenic (As)	0.05% Max.
Cadmium (Cd)	0.01% Max.
Calcium (Ca)	0.05% Max.
Iron (Fe)	0.05% Max.
Heavy Metals (Pb)	0.01% Max.

CAS No. 557-34-6

Tariff No. 29152990

UN No. 3077

Class 9

PG III



Environmental Hazards



Irritant

ZINC ACETATE DIHYDRATE

Grade: LR

Product No: 22062

M.F.	$\text{Zn}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$
M.W.	219.50
Description	Colourless or White Efflorescent Crystals with a Faint Odour of Acetic Acid
Assay (ex Zn)	98.5% Min.
Chloride (Cl)	0.02% Max.
Sulphate (SO_4)	0.02% Max.
Iron (Fe)	0.002% Max.
Lead (Pb)	0.004% Max.

CAS No. 5970-45-6

Tariff No. 29152990

UN No. 3077

Class 9

PG III



Environmental Hazards



Irritant

ZINC ACETATE DIHYDRATE

Grade: AR

Product No: 32063

M.F.	$\text{Zn}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$
M.W.	219.50
Description	Colourless or White Efflorescent Crystals with a Faint Odour of Acetic Acid
pH 5% Solution at 25°C	6.0 - 7.0
Assay (ex Zn)	99.5% Min.
Insoluble Matter	0.003% Max.
Chloride (Cl)	0.001% Max.
Sulfate (SO_4)	0.005% Max.
Cadmium (Cd)	0.005% Max.
Calcium (Ca)	0.001% Max.
Magnesium (Mg)	0.005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Nitrogen (N)	0.002% Max.

CAS No. 5970-45-6

Tariff No. 29152990

UN No. 3077

Class 9

PG III



Environmental Hazards



Irritant

ZINC ACETATE DIHYDRATE

Grade: ACS

Product No: 42064

M.F.	$\text{Zn}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$
M.W.	219.51
Description	Colourless or White Efflorescent Crystals with a Faint Odour of Acetic Acid
pH 5% Solution at 25°C	6.0-7.0



Environmental Hazards

Assay (ex Zn)	98.0% - 101.0%
Insoluble Matter	0.005% Max.
Chloride (Cl)	5ppm Max.
Sulfate (SO_4)	0.005% Max.
Calcium (Ca)	0.005% Max.
Magnesium (Mg)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.05% Max.
Iron (Fe)	5ppm Max.
Lead (Pb)	0.002% Max.

CAS No. 5970-45-6

Tariff No. 29152990

UN No. 3077

Class 9

PG III



Irritant

ZINC BROMIDE ANHYDROUS

Grade: LR

Product No: 22012

M.F.	ZnBr_2
M.W.	225.19
Description	White Hygroscopic Powder
Assay (ex Zn)	98.0% Min.
Reaction	pH 6-7 (2% Aqueous Solution).
Sulphate (SO_4)	0.002% Max.
Water (KF)	2.0% Max.

CAS No. 7699-45-8

Tariff No. 28275990

UN No. 3260

Class 8

PG III



Corrosive



Environmental Hazards



Irritant

ZINC BROMIDE ANHYDROUS

Grade: AR

Product No: 32013

M.F.	ZnBr_2
M.W.	225.21
Description	White, very Hygroscopic Crystalline Powder
Assay (ex Zn)	98.5% Min.
Alkalies and Earth Metals	0.2% Max.
Insoluble Matter in HCl	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Iron (Fe)	0.001% Max.
Lead (Pb)	0.005% Max.
Water (KF)	1.0% Max.

CAS No. 7699-45-8

Tariff No. 28275990

UN No. 3260

Class 8

PG III



Corrosive



Environmental Hazards



Irritant

ZINC BROMIDE ANHYDROUS

Grade: ULTRAPURE

Product No: 52015

M.F.	ZnBr_2
M.W.	225.19
Description	White, very Hygroscopic Crystalline Powder
Assay (ex Zn)	99.7% Max.
Lead (Pb)	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Water (KF)	0.5% Max.

CAS No. 7699-45-8

Tariff No. 28275990

UN No. 3260

Class 8

PG III



Corrosive



Environmental Hazards



Irritant

ZINC CARBONATE BASIC

Grade: LR

(Zinc Carbonate Hydroxide)

Product No: 22042

M.F.	$2\text{ZnCO}_3 \cdot 3\text{Zn}(\text{OH})_2 \cdot \text{H}_2\text{O}$
M.W.	566.96 (Anhydrous)
Description	White Powder
Assay (as a ZnO)	73.0% Min.
Chloride (Cl)	0.05% Max.
Sulphate (SO_4)	0.4% Max.
Iron (Fe)	0.01% Max.



No GHS

CAS No. 12539-71-8 / 5263-02-5

Tariff No. 28366000

NON DG

ZINC CITRATE DIHYDRATE

Grade: LR

Product No: 22068

M.F.	$\text{Zn}_3(\text{C}_6\text{H}_5\text{O}_7)_2 \cdot 2\text{H}_2\text{O}$
M.W.	610.37
Description	White Granulated Powder
Assay (as a Zn)	31.0% - 31.5%
Chloride (Cl)	0.05% Max.
Sulfate (SO_4)	0.05% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.05% Max.



No GHS

CAS No. 5990-32-9

Tariff No. 29181590

NON DG

ZINC CITRATE TRIHYDRATE

Grade: LR

Product No: 22069

M.F.	$\text{Zn}_3(\text{C}_6\text{H}_5\text{O}_7)_2 \cdot 3\text{H}_2\text{O}$
M.W.	628.29
Description	White Fine Powder
pH 3% Suspension	5.0 - 7.0
Assay (as a Zn)	30.9% - 31.5%
Chloride (Cl)	0.05% Max.
Sulfate (SO_4)	0.05% Max.
Iron (Fe)	0.01% Max.
Lead (Pb)	0.05% Max.



No GHS

CAS No. 546-46-3

Tariff No. 29181590

NON DG

ZINC FLUORIDE ANHYDROUS

Grade: LR

Product No: 22038 I

M.F.	ZnF_2
M.W.	103.39
Description	White Crystalline Powder
Assay (ex F)	98.0% Min.
Iron (Fe)	0.05% Max.
Lead (Pb)	0.01% Max.
Sulfate (SO_4)	0.01% Max.
Moisture	2.0% Max.



Corrosive



Irritant

CAS No. 7783-49-5

Tariff No. 28261990

NON DG

ZINC IODIDE ANHYDROUS

Grade: LR

Product No: 22072

M.F.	ZnI_2
M.W.	319.18
Description	White/Cream to Yellow/brown Crystalline Powder, extremely Deliquescent; Photosensitive.
Assay (ex Zn)	98.0% Min.
Iodate (IO_3)	0.2% Max.
Sulfate (SO_4)	0.2% Max.
Iron (Fe)	0.01% Max.



Corrosive

CAS No. 10139-47-6

Tariff No. 28276090

UN No. 3260

Class 8

PG III

ZINC IODIDE ANHYDROUS

Grade: AR

Product No: 32073

M.F.	ZnI_2
M.W.	319.18
Description	White/Cream to Yellow/brown Crystalline Powder, extremely Deliquescent; Photosensitive.
Assay (ex Zn)	99.0% Min.
Iodate (IO_3)	0.1% Max.
Sulfate (SO_4)	0.01% Max.
Calcium (Ca)	0.01% Max.
Cadmium (Cd)	0.005% Max.
Cobalt (Cu)	0.005% Max.
Copper (Cu)	0.005% Max.
Iron (Fe)	0.005% Max.
Potassium (K)	0.01% Max.
Sodium (Na)	0.01% Max.
Nickel (Ni)	0.005% Max.
Lead (Pb)	0.005% Max.
Water (KF)	1.0 % Max.



Corrosive



Irritant

CAS No. 10139-47-6

Tariff No. 28276090

NON DG

ZINC IODIDE ANHYDROUS

Grade: ULTRAPURE

Product No: 52075

M.F.	ZnI_2
M.W.	319.18
Description	White/Cream to Yellow/Brown Crystalline Powder; extremely Deliquescent; Photosensitive.
Assay	99.9% Min.
Water (By KF)	0.5% Max.



Corrosive



Irritant

CAS No. 10139-47-6

Tariff No. 28276090

NON DG

ZINC NITRATE HEXAHYDRATE

Grade: LR

Product No: 22052

M.F.	$\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	297.48
Description	Colourless Crystals
pH 10% Solution	3.0 - 8.0
Assay (ex Zn)	96.0% - 103.0%
Calcium (Ca)	0.005% Max.
Sulphate (SO_4)	0.01% Max.
Iron (Fe)	0.005% Max.



Irritant



Oxidizing

CAS No. 10196-18-6

Tariff No. 28342990

UN No. 1514

Class 5.1

PG II

Notes

ZINC NITRATE HEXAHYDRATE

Grade: AR

Product No: 32053

M.F.	$\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	297.48
Description	Colourless Crystals
Assay (ex Zn)	98.0% Min.
pH 5% Solution	3.0 - 6.0
Water Insoluble Matter	0.005% Max.
Calcium (Ca)	0.001% Max.
Sulphate (SO_4)	0.005% Max.
Cadmium (Cd)	0.0005% Max.
Chloride (Cl)	0.001% Max.
Copper (Cu)	0.0005% Max.
Iron (Fe)	0.0005% Max.
Lead (Pb)	0.0005% Max.
Magnesium (Mg)	0.001% Max.
Nickel (Ni)	0.0005% Max.
Potassium (K)	0.001% Max.
Sodium (Na)	0.001% Max.

CAS No. 10196-18-6
Tariff No. 28342990

UN No. 1514

Class 5.1

PG II



Irritant



Oxidizing

ZINC NITRATE HEXAHYDRATE

Grade: ACS

Product No: 42054

M.F.	$\text{Zn}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
M.W.	297.48
Description	Colourless Crystals
Assay (ex Zn)	99.0% - 101.0%
pH 5% Solution	3.5 - 5.5
Water Insoluble Matter	0.005% Max.
Chloride (Cl)	0.002% Max.
Sulphate (SO_4)	0.005% Max.
Lead (Pb)	0.005% Max.
Iron (Fe)	0.0005% Max.
Copper (Cu)	0.0005% Max.

CAS No. 10196-18-6
Tariff No. 28342990

UN No. 1514

Class 5.1

PG II



Irritant



Oxidizing

ZINC PHOSPHATE HYDRATE

Grade: PURE

Product No: 12026

M.F.	$\text{Zn}_3(\text{PO}_4)_2 \cdot x\text{H}_2\text{O}$
M.W.	386.05
Description	A White Powder
Assay (as a Zn)	41.5% - 50.5%
Chloride (Cl)	0.1% Max.
Sulfate (SO_4)	0.3% Max.

CAS No. 7543-51-3

Tariff No. 28352990

UN No. 3077

Class 9

PG III



Environmental Hazards



Toxic

ZINC PERCHLORATE HEXAHYDRATE

Grade: LR

Product No: 22045

M.F.	$\text{Zn}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$
M.W.	372.36
Description	White Moist Hygroscopic Crystal
Assay (ex Zn)	98.0% Min.

CAS No. 10025-64-6

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II



Corrosive



Oxidizing

ZINC PERCHLORATE HEXAHYDRATE

Grade: AR

Product No: 32045

M.F.	$\text{Zn}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$
M.W.	372.36
Description	White Moist Hygroscopic Crystal
pH 5% Solution	4.0 - 6.0
Assay (ex Zn)	99.0% Min.
Insoluble Matter	0.01% Max.
Chloride (Cl)	0.01% Max.
Sulfate (SO_4)	0.005% Max.
Iron (Fe)	0.005% Max.

CAS No. 10025-64-6

Tariff No. 28299010

UN No. 1481

Class 5.1

PG II



Corrosive



Oxidizing

Notes

Metal INGOT & Powder

ANTIMONY POWDER

Grade: LR

Product No: 22102

M.F. Sb
M.W. 121.76
Description Greyish Black
Assay 99.0% Min.
Other Metal Trace Impurities 1.0% Max.
-325 Mesh 100% Pass



Environmental Hazards



Irritant

CAS No. 7440-36-0
Tariff No. 81101000

UN No. 2871

Class 6.1

PG III

BISMUTH METAL GRANULAR

Grade: LR

Product No: 20102

M.F. Bi
M.W. 208.98
Description Grey with a Reddish Tinge
Assay 99.5% Min.
Other Metal Trace Impurities 0.5% Max.



No GHS

CAS No. 7440-69-9
Tariff No. 81060010

NON DG

CHROMIUM METAL POWDER

Grade: LR

Product No: 21902

M.F. Cr
M.W. 51.996
Description Steel-Grey Metallic Powder
Assay 99.0% Min.
Other Metal Trace Impurities 1.0% Max.
-325 Mesh 100% Pass



Environmental Hazards

CAS No. 7440-47-3
Tariff No. 8112 2190

UN No. 3077

Class 9

PG III

COBALT METAL POWDER

Grade: AR

Product No: 30303

M.F. Co
M.W. 58.93
Description Light Grey Powder
Assay 99.5% Min.
Other Metal Trace Impurities 0.5% Max.
-325 Mesh 100% Pass



Health Hazards

CAS No. 7440-48-4
Tariff No. 81052010

UN No. 3089

Class 4.1

PG II

Notes

COPPER POWDER

Grade: LR

Product No: 20302

M.F. Cu
M.W. 63.54
Description A Fine Raddish-Brown Metallic Powder
Assay (Metal Basis) 99.0% Min.
Other Trace Metal Impurities 1.0% Max.
-100 Mesh 100 % Pass



Environmental Hazards

CAS No. 7440-50-8
Tariff No. 81052010

UN No. 3077

Class 9

PG III

COPPER POWDER ELECTROLYTIC 99.5 %

Grade: Ultra Pure

Product No: 50305

M.F. Cu
M.W. 63.55
Description Reddish Brown Powder
Assay (ex Cu) 99.5% Min.
Substance Insoluble in HNO₃ 0.05% Max.
Antimony (Sb) 0.005% Max.
Arsenic (As) 0.0002% Max.
Lead (Pb) 0.05% Max.
Iron (Fe) 0.005% Max.
Manganese (Mn) 0.005% Max.
Silver (Ag) 0.005% Max.
Tin (Sn) 0.005% Max.
10 -15 Micron 100% Pass



Environmental Hazards

CAS No. 7440-50-8
Tariff No. 81052010

UN No. 3077

Class 9

PG III

IRON POWDER

Grade: LR

Product No: 22702

M.F. Fe
M.W. 55.84
Description Steel Grey-Black Fine Powder
Assay 99.5% Min.
Other Trace Metal Impurities 0.5% Max.
-200 Mesh 100% Pass



No GHS

CAS No. 7439-89-6
Tariff No. 72051090

NON DG

MAGNESIUM POWDER

Grade: AR

Product No: 30803

M.F. Mg
M.W. 24.31
Description Light Grey Powder
Assay (Complexometric) 99.8% Min.
Other Metal Trace Impurities 0.2% Max.
-325 Mesh 100% Pass



Flammable

CAS No. 7439-95-4
Tariff No. 81043020

UN No. 1869

Class 4.1

PG III

MANGANESE POWDER

Grade: LR

Product No: 21601

M.F.	Mn
M.W.	54.938
Description	Brownish Grey Metallic Powder
Assay	99.0% Min.
Other Metal Trace Impurities	1.0% Max.
-325 Mesh	100% Pass

CAS No. 7439-96-5

Tariff No. 81110010

UN No. 3208

Class 4.3

PG I



Flammable

MOLYBDENUM POWDER

Grade: LR

Product No: 22502

M.F.	Mo
M.W.	95.94
Description	Grey Powder
Assay	99.5% Min.
Other Metal Trace Impurities	0.5% Max.
-325 Mesh	100% Pass

CAS No. 7439-96-5

Tariff 81011000

UN No. 3208

Class 4.3

PG I



Flammable

NICKEL POWDER

Grade: LR

Product No: 20802

M.F.	Ni
M.W.	58.69
Description	Grey Fine Powder
Assay (as a Nickel)	99.5% Min.
Other Metal Trace Impurities	0.5% Max.
-325 Mesh	100 % Pass

CAS No. 7440-02-0

Tariff 75040000

UN No. 1378

Class 4.2

PG II



Flammable



Health Hazards



Irritant

SILVER POWDER

Grade: LR

Product No: 21702

M.F.	Ag
M.W.	107.87
Description	Grey or Pale Beige Powder.
Assay (as a Nickel)	99.5% Min.
Other Metal Trace Impurities	0.5% Max.
-325 Mesh	100% Pass

CAS No. 7440-22-4

Tariff 71061000

NON DG



No GHS

TIN POWDER

Grade: LR

Product No: 20702

M.F.	Sn
M.W.	118.69
Description	Grey Fine Powder.
Assay	99.0% Min.
Other Trace Metal Impurities	1.0% Max.
-200 Mesh	100% Pass

CAS No. 7440-31-5

Tariff No. 80070090

NON DG



No GHS

TIN GRANULAR

Grade: LR

Product No: 20702G

M.F.	Sn
M.W.	118.69
Description	Grey Fine Granular
Assay	99.0% Min.
Lead (Pb)	0.01% Max.
Iron (Fe)	0.01% Max.
Copper (Cu)	0.01% Max.

CAS No. 7440-31-5

Tariff No. 80070090

NON DG



Irritant

TITANIUM POWDER

Grade: AR

Product No: 32603

M.F.	Ti
M.W.	47.90
Description	Greyish Black
Assay	99.0% Min.
Other Metal Trace Impurities	1.0% Max.
-325 Mesh	100% Pass

CAS No. 7440-32-6

Tariff No. 81082000



No GHS

TUNGSTEN POWDER

Grade: LR

Product No: 22802

M.F.	W
M.W.	183.85
Description	Grayish Black Powder
Assay	99.0% Min.
Other Metal Trace Impurities	1.0% Max.
-325 Mesh	100% Pass

CAS No. 7440-33-7

Tariff No. 81011000

NON DG



Flammable



Irritant

ZINC POWDER

Grade: LR

Product No: 22002

M.F.	Zn
M.W.	65.37
Description	Grey Fine Powder
Assay	98.0% Min.
Other Metal Trace Impurities	1.0% Max.
-325 Mesh	100% Pass

CAS No. 7440-66-6

Tariff No. 79031000

UN No. 1436

Class 4.3(4.2)

PG III



Environmental Hazards

Notes

PERIODIC TABLE OF ELEMENTS

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IA Hydrogen 1 H 1.0079 IIa Beryllium 4 Be 9.012 Magnesium 12 Mg 24.305 Calcium 20 Ca 40.078 Strontium 38 Sr 87.62 Barium 56 Ba 137.33 Radium 88 Ra [226] <tr><td> IIIb Scandium 21 Sc 44.956 Yttrium 39 Y 88.906 57 - 71 Lanthanides [see below] 89 - 103 Actinides [see below] <tr><td> IVb Titanium 22 Ti 47.867 Zirconium 40 Zr 91.224 Hafnium 72 Hf 178.49 Rutherfordium 104 Rf [261] <tr><td> Vb Vanadium 23 V 50.942 Niobium 41 Nb 92.906 Tantalum 73 Ta 180.95 Dubnium 105 Db [262] <tr><td> VIb Chromium 24 Cr 51.996 Molybdenum 42 Mo 95.96 Tungsten 74 W 183.84 Seaborgium 106 Sg [266] <tr><td> VII Manganese 25 Mn 54.938 Technetium 43 Tc [98] Rhenium 75 Re 186.21 Bohrium 107 Bh [264] <tr><td> VIII Iron 26 Fe 55.845 Ruthenium 44 Ru 101.07 Osmium 76 Os 190.23 Hassium 108 Hs [277] <tr><td> VIII Cobalt 27 Co 58.933 Rhodium 45 Rh 102.91 Iridium 77 Ir 192.22 Meitnerium 109 Mt [268] <tr><td> VIII Nickel 28 Ni 58.693 Palladium 46 Pd 106.42 Platinum 78 Pt 195.08 Darmstadtium 110 Ds [271] <tr><td> IIb Copper 29 Cu 63.546 Silver 47 Ag 107.87 Gold 79 Au 196.97 Roentgenium 111 Rg [272] <tr><td> Zn Zinc 30 Zn 65.38 Cadmium 48 Cd 112.41 Mercury 80 Hg 200.59 Ununbium 112 Uub [285] <tr><td> IIIa Boron 5 B 10.811 Aluminium 13 Al 26.982 Gallium 31 Ga 69.723 Indium 49 In 114.82 Thallium 81 Tl 204.38 Ununtrium 113 Uut [284] <tr><td> IVa Carbon 6 C 12.011 Silicon 14 Si 28.086 Germanium 32 Ge 72.64 Tin 50 Sn 118.71 Lead 82 Pb 207.2 Ununquadium 114 Uuq [289] <tr><td> Va Nitrogen 7 N 14.007 Phosphorus 15 P 30.974 Arsenic 33 As 74.922 Antimony 51 Sb 121.76 Bismuth 83 Bi 208.98 Ununpentium 115 Uup [288] <tr><td> VIa Oxygen 8 O 15.999 Sulphur 16 S 32.065 Selenium 34 Se 78.96 Tellurium 52 Te 127.60 Polonium 84 Po [209] Ununhexium 116 Uuh [292] <tr><td> VIIa Fluorine 9 F 18.998 Chlorine 17 Cl 35.453 Bromine 35 Br 79.904 Iodine 53 I 126.90 Astatine 85 At [210] Ununseptium 117 Uus [294] <tr><td> VIIIa Helium 2 He 4.0026 Neon 10 Ne 20.180 Argon 18 Ar 39.948 Krypton 36 Kr 83.798 Xenon 54 Xe 131.29 Radon 86 Rn 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IIIb Scandium 21 Sc 44.956 Yttrium 39 Y 88.906 57 - 71 Lanthanides [see below] 89 - 103 Actinides [see below] <tr><td> IVb Titanium 22 Ti 47.867 Zirconium 40 Zr 91.224 Hafnium 72 Hf 178.49 Rutherfordium 104 Rf [261] <tr><td> Vb Vanadium 23 V 50.942 Niobium 41 Nb 92.906 Tantalum 73 Ta 180.95 Dubnium 105 Db [262] <tr><td> VIb Chromium 24 Cr 51.996 Molybdenum 42 Mo 95.96 Tungsten 74 W 183.84 Seaborgium 106 Sg [266] <tr><td> VII Manganese 25 Mn 54.938 Technetium 43 Tc [98] Rhenium 75 Re 186.21 Bohrium 107 Bh [264] <tr><td> VIII Iron 26 Fe 55.845 Ruthenium 44 Ru 101.07 Osmium 76 Os 190.23 Hassium 108 Hs [277] <tr><td> VIII Cobalt 27 Co 58.933 Rhodium 45 Rh 102.91 Iridium 77 Ir 192.22 Meitnerium 109 Mt [268] <tr><td> VIII Nickel 28 Ni 58.693 Palladium 46 Pd 106.42 Platinum 78 Pt 195.08 Darmstadtium 110 Ds [271] <tr><td> IIb Copper 29 Cu 63.546 Silver 47 Ag 107.87 Gold 79 Au 196.97 Roentgenium 111 Rg [272] <tr><td> Zn Zinc 30 Zn 65.38 Cadmium 48 Cd 112.41 Mercury 80 Hg 200.59 Ununbium 112 Uub 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Alkali Metals

Alkaline-earth metals

Transition metals

Lanthanides

Actinides

Poor metals

Semi-metals

Non-metals

Noble gases

Name of element

Atomic Number

Chemical Symbol

Atomic Weight

[Figures in brackets are for most stable isotope]



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S.K. CHEMICAL INDUSTRIES™ was established in 1968, in response to the great demand for a manufacturer of inorganic Metal Fine Chemicals, Ultra Pure Anhydrous Grade & ACS Grade with Expertise & Facilities for the application of advance Manufacturing Methodologies & Technologies. Our Inorganic Metal Fine Chemicals are made from Virgin Metals, High Purity Acid & High Purity Chemicals



BARIUM	BISMUTH(III)	CADMIUM	CALCIUM	CESIUM	COBALT(II)	COPPER(II)	INDIUM(III)
Acetate	Acetate	Acetate	Acetate	Bromide	Acetate	Acetate	Acetate
Bromide	Borate	Borate	Bromide	Chloride	Bromide	Bromide	Bromide
Carbonate	Bromide	Bromide	Carbonate	Fluoride	Carbonate	Carbonate	Chloride
Chromate	Carbonate	Carbonate	Iodide	Iodide	Chloride	Chloride	Fluoride
Iodide	Chromate	Chromate	Perchlorate	Nitrate	Citrate	Citrate	Iodide
Fluoride	Chloride	Chloride			Chromate	Chromate	Nitrate
Nitrate	Hydroxide	Fluoride			Fluoride	Fluoride	Sulfate
Perchlorate	Iodide	Hydroxide			Hydroxide	Hydroxide	
	Nitrate	Iodide			Iodide	Nitrate	
	Oxide	Nitrate			Nitrate	Oxalate	
	Perchlorate	Oxide			Oxalate	Oxide	
	Sulfate	Perchlorate			Oxide	Perchlorate	
	Sulfide	Sulfate			Perchlorate	Sulfate	
		Sulfide			Sulfate	Sulfide	
					Sulfide		
LITHIUM	LEAD	MAGNESIUM	MANGANESE(II)	MERCURY	NICKEL(II)	STRONTIUM	ZINC
Acetate	Acetate	Acetate	Acetate	Acetate	Acetate	Acetate	Acetate
Borate	Bromide	Bromide	Bromide	Bromide	Borate	Bromide	Bromide
Bromide	Carbonate	Chloride	Carbonate	Chloride	Bromide	Carbonate	Carbonate
Chloride	Citrate	Chromate	Chloride	Iodide	Carbonate	Chloride	Citrate
Citrate	Iodide	Citrate	Citrate	Nitrate	Chloride	Citrate	Iodide
Chromate	Nitrate	Iodide	Fluoride	Oxide	Citrate	Fluoride	Perchlorate
Fluoride		Nitrate	Iodide	Perchlorate	Fluoride	Iodide	
Iodide		Perchlorate	Oxalate	Sulfate	Hydroxide	Oxalate	
Nitrate		Sulfate	Oxide		Iodide	Perchlorate	
Oxalate			Perchlorate		Oxalate	Sulfate	
Perchlorate			Sulfate		Oxide		
Phosphate			Sulfide		Perchlorate		
Sulfate					Sulfate		
					Sulfide		

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818, 819, Corporate Avenue,
Sonawala Road, Goregaon (East),
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