SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

1.1.1. Trade name/designation

Dry Charge Battery

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Power sport batteries

1.2.2. Uses advised against

Any other not listed above

1.3. Details of the supplier

1.3.1. Supplier:

GS Battery (U.S.A) Inc.

1.3.2. Website

www.gsbattery.com

1.3.3. Information contact

1150 Northmeadow Parkway
STE110
Roswell
GA 30076-3886

1.3.4. National contact

GS Battery (U.S.A.) Inc: (678) 762-4818

1.4. Emergency Telephone Number

CHEMTREC: Domestic (800)424-9300
International: 1(703)527-3887

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Class 13: Non-flammable solids in non-flammable package

2.1.2 Classification according to 67/548/EEC or 1999/45/EC

Xi: Irritating

2.2. Label elements

2.2.1 Labeling according to Regulation (EC) No 1272/2008

Product identifier:

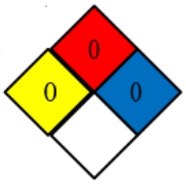
Dry Charge Battery

Hazard pictograms:



Xi: Irritating

NFPA:



WHMIS:

Not Regulated

Signal word:

CAUTION

Hazard statements:

May be harmful in contact with skin
Causes skin irritation
May cause respiratory irritation
Warning! Contains lead

Precautionary statements:

Keep out of reach of children.
Keep containers tightly closed.
Keep away from heat, sparks, and open flame while charging batteries.

2.3. Other hazards

Adverse human health effects and symptoms:

Inhalation: (Acute): Under normal conditions of use, no health effects are expected.
(Chronic): Repeated and prolonged exposure may cause irritation.

Skin: (Acute): Under normal conditions of use, no health effects are expected.
(Chronic): No data available

Eye: (Acute): Under normal conditions of use, no health effects are expected. Exposure to dust may cause irritation.
(Chronic): no data available.

Ingestion: (Acute): Under normal conditions of use, no health effects are expected. Lead ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping.
(Chronic): no data available.

Carcinogenic Effects:

Material is an article. No health effects are expected related to normal use of this product as sold. Material does contain components that exhibit carcinogenic effects.

Symptoms of lead toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability. Lead absorption may cause nausea, weight loss, abdominal spasms, and pain in arms, legs and joints.

Effects of chronic lead exposure may include central nervous system (CNS) damage, kidney dysfunction, anemia, neuropathy particularly of the motor nerves with wrist drop, and potential reproductive effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Description of the mixture:

CAS No	EC No	% [weight]	Name	WHMIS Classifications	Classification according to CLP (1272/2008)
7439-92-1	231-100-4	89-92%	Lead	D2A	Xn, N, T; R20/22, R33, R50, R50/53, R53, R61, R62; Repr. Cat. 1, Repr. Cat. 3; S53, S45, S60, S61 except those specified elsewhere in the annex
7440-36-0	231-146-5	0.2%	Antimony	Uncontrolled product according to WHMIS classification criteria; D1B (powder)	Xn, N; R20/22, R51/53;S2, S61 except tetroxide, pentoxide, trisulphide, pentasulphide, and those specified elsewhere in the annex
7440-31-5	231-141-8	0.006%	Tin	Uncontrolled product according to WHMIS classification criteria	Not Listed
7440-38-2	231-148-6	0.003%	Arsenic	D1A, D2A	T, N; R23/25, R50/53; S1/2, S20/21, S28, S45, S60, S61
7440-70-2	231-179-5	0.002%	Calcium	B6, E	F; R15; S2, S8, S24/25, S43

Case material composes 5-6% of the article. Case material includes the following components: 1-Propene, homopolymer (9003-07-0); Polystyrene (9003-53-6); Acrylonitrile, polymer with styrene (9003-54-7); Acrylonitrile, polymer with 1,3-butadiene and styrene (9003-56-9); Styrene polymer with 1,3-butadiene and styrene (9003-56-9); Styrene polymer with 1,3-butadine (Kraton) (9003-55-8); Ethylene, chloro-, polymer (9003-86-2); Hard Rubber; Polycarbonate; Polyethylene.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1 Eye contact:

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

If contact with material occurs flush eyes with water. If signs/symptoms develop, get medical attention.

4.1.2 Inhalation:

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air.

4.1.3 Skin contact:

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.

4.1.4 Ingestion:

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If ingested consult physician immediately.

4.1.5 Self-protection of the first aider:

If artificial respiration is required use a pocket mask equipped with a one-way valve or other proper respiratory medical device.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media:

5.1.1 Suitable extinguishing media:

CO2, dry chemical or foam

5.1.2 Unsuitable extinguishing media:

Avoid using water

5.2. Special hazards arising from the substance or mixture

5.2.1 Hazardous combustion products:

Lead portion of battery will likely produce toxic metal fume, vapor or dust.

5.3. Advice for fire-fighters:

Keep sparks or other sources of ignition away from batteries. Do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries.

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

5.4. Additional information:

Material itself is non-combustible although in fire situations will likely produce toxic metal fume, vapor or dust.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

No special precautions expected to be necessary if material is used under ordinary conditions and as recommended. Avoid contact of lead with skin.

6.1.1 For non-emergency personnel

Protective equipment: Wear chemical gloves

6.1.2 For emergency responders

No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

Personal protective equipment:

Wear chemical gloves, goggles, acid resistant clothing and boots, respirator if insufficient ventilation.

6.2. Environmental precautions:

Prevent entry into waterways, sewers, basements or confined areas. Runoff from fire control and dilution water may be toxic and corrosive and may cause adverse environmental impacts.

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:

Lead dust should be vacuumed or wet swept into a D.O.T. approved container. Use controls that minimize fugitive emissions. Do not use compressed air.

6.3.2 For cleaning up:

Contact local and/or state officials for proper disposal requirements.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1 Protective measures:

Handle batteries cautiously. Do not tip to avoid spills (if filled with electrolyte). Avoid contact with internal components. Wear protective clothing when filling or handling batteries. Follow manufacturer's instructions for installation and service. Do not allow conductive material to touch the battery terminals. Short circuit may occur and cause battery failure and fire.

7.1.2 Advice on general occupational hygiene

Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Eyewash stations and safety showers should be provided with unlimited water supply. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Avoid contact with strong bases, acids, combustible organic materials, halides, halogenates, potassium

nitrate, permanganate, peroxides, nascent hydrogen, reducing agents and water.

Technical measures and storage conditions:

Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Batteries should be stored under roof for protection against adverse weather conditions. Place cardboard between layers of stacked batteries to avoid damage and short circuits. Store batteries on an impervious surface. Storage class:

Class 13: Non-flammable solids in non-flammable package

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1 Occupational exposure limits:

Limit value type (County of origin)	Sub-stance name	EC-No.	CAS-No	Limit value	Monitoring and observa-tion processes
TWA (ACGIH USA) STEL (CA-ON) TWA (CA- ON) TWA (CA-QU) STEL (CH) TWA (CH) TWA (FI) Biological Limit Value (FI) TWA (ME) Ceiling (NIOSH)	Arsenic		7440-38-2	0.01 mg/m^3 50 $\mu g/m^3$ 10 $\mu g/m^3$ 1.1 mg/m^3 1.2 mg/m^3 0.01 mg/m^3 0.01 mg/m^3 70 nmol/L 1.1 mg/m^3 1.2 mg/m^3	Designated substance regulation Medium: Urine Time: end of shift at end of workweek
TWA(ACGIH USA) TWA (CA) TWA (FI) STEL(ME) TWA (ME) TWA (NIOSH USA)	Tin	231-141-8	7440-31-5	2 mg/m^3 2 mg/m^3 2 mg/m^3 4 mg/m^3 2 mg/m^3 2 mg/m^3	
TWA(ACGIH USA) TWA (CA) TWA (FI) STEL(ME) TWA (ME) TWA (NIOSH USA)	Tin	231-141-8	7440-31-5	2 mg/m^3 2 mg/m^3 2 mg/m^3 4 mg/m^3 2 mg/m^3 2 mg/m^3	
TWA (ACGIH) TWA(CA ON) TWA(CA QU) STEL(CH) TWA(CH) TWA(FI) Biological Limit Value (FI) TWA(JP) TWA(ME) TWA(NIOSH) TWA(OSHA)	Lead	231-100-4	7439-92-1	0.05 mg/m^3 0.05 mg/m^3 0.05 mg/m^3 0.15 (0.09) mg/m^3 0.05(0.03)mg/m^3 0.1 mg/m^3 1.4 umol/L 0.1 mg/m^3 0.15 mg/m^3 0.05 mg/m^3 50 ug/m^3	Designated substance regulation Dust (fume) Dust (fume) Dust As Pb, dust and fume

8.2. Exposure controls

8.2.1 Appropriate engineering controls:

Store and charge in a well-ventilated area. General dilution ventilation is acceptable.

8.2.2 Personal protective equipment:

8.2.2.1 Pictograms:



8.2.2.2 Eye/Face protection:

Wear protective eyewear (goggles, face shield or safety glasses with side shields).

8.2.2.3 Skin protection:

Wear appropriate gloves.

No skin protection is ordinarily required under normal conditions of use. In accordance with industrial hygiene practices, if contact with leaking battery is expected precautions should be taken to avoid skin contact. Under severe exposure or emergency conditions, wear acid-resistant clothing and boots.

8.2.2.4 Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.1.1. Appearance

Physical state: Solid Color: Bluish gray metal Odor: Odorless Odor threshold: No Data

9.1.2. Safety relevant basic data

pH (20 ˚C): No Data
Melting point/range(˚C): 252.2222-360
Initial boiling point/range (˚C): 1380
Decomposition temperature (˚C): No Data
Flash point (˚C): No Data
Ignition temperature (˚C): No Data
Vapor pressure (hPa): No Data
Vapor density (air = 1): No Data
Density (g/cm3): 599.3267-705.4575 lbs/ft^3
Bulk density (kg/m3): No Data
Specific Gravity/Relative Density (Water=1): 9.6-11.3
Water solubility (20˚C in g/l): No Data
Solubility(ies): No Data
Partition coefficient: No Data

N-Octanol/Water (log Po/w): No Data
Viscosity, dynamic (mPa s): No Data

9.2. Other safety information:

Properties of explosive atmospheres (mixtures):
Gases and vapors: No Data
Dusts: No Data
Physical chemical properties of nanoparticles: No Data
Limiting oxygen concentration: No Data
Bulk density: No Data
Solubility in different media: No Data
Stability in organic solvents and identity of relevant degradation products: No Data
Evaporation rate: No Data
Conductivity: No Data
Surface tension: No Data
Dissociation constant in water (pKa): No Data
Oxidation-reduction Potential: No Data
Fat solubility (solvent – oil to be specified): No Data
Critical temperature: No Data

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity:

Not reactive

10.2. Chemical stability:

Stable under normal temperatures and pressures

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid:

Prolonged overcharge, sources of ignition.

10.5. Incompatible materials:

Avoid contact with strong bases, acids, combustible organic materials, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen, reducing agents and water.

10.6. Hazardous decomposition products:

Lead compounds exposed to high temperatures will likely produce toxic metal fume, vapor or dust; contact with strong acid/base or presence of nascent hydrogen may generate highly toxic arsine gas.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Lead (7439-92-1)	Effect dose / Concentration	Species	Method	Time
Acute oral toxicity	155 mg/kg	Human	LDLo	
Acute oral toxicity	1050 ug/kg	Rat	TDLo	30 Weeks(int.)
Acute inhalative toxicity (dust/mist)	0.011 mg/m^3	Human	LCLo	26 Weeks (int.)
Mutagen	23 ug/m^3	Rat	Inhalation	16 Weeks
Reproductive	790 mg/kg	Rat	TDLo (Oral)	
Reproductive	3 mg/m^3	Rat	TCLo (Inhalation)	1-21 Days preg.
Antimony (7440-36-0)	Effect dose / Concentration	Species	Method	Time
Acute oral toxicity	100 mg/kg	Rat	LD50	
Acute inhalative toxicity (dust/mist)	13.5 mg/m3	Human	LCLo	4 Hours
Tumorigen/Carcinogen	50 mg/m3	Rat	TCLo	7 hours 52 weeks (int.)
Arsenic (7440-38-2)	Effect dose / Concentration	Species	Method	Time
Acute oral toxicity	763 mg/kg	Rat	LD50	
Acute oral toxicity	5 mg/kg	Rat	LDLo	
Mutagen	0.211 mg/L	Human	Oral	15 Years
Reproductive	605 ug/kg	Rat	TDLo	35 weeks preg.

11.2. Other information:

11.2.1 Carcinogenic Effects:

Material is an article. No health effects are expected related to normal use of this product as sold. Material does contain components that exhibit carcinogenic effects.

Carcinogenic Effects			
	CAS	IARC	NTP
Lead	7439-92-1	Group 2A–Probable Carcinogen	Reasonably anticipated to be human carcinogen

11.2.2 Routes of exposure:

11.2.2.1 In case of ingestion:

Acute (Immediate): Under normal conditions of use, no health effects are expected. Lead ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping.

Chronic (Delayed): No data available

11.2.2.2 In case of skin contact:

Acute (Immediate): Under normal conditions of use, no health effects are expected.

Chronic (Delayed): No data available

11.2.2.3 In case of inhalation:

Acute (Immediate): Under normal conditions of use, no health effects are expected. Contents of an open battery can cause respiratory irritation.

Chronic (Delayed): Repeated and prolonged exposure may cause irritation.

11.2.2.4 In case of eye contact:
Acute (Immediate): Under normal conditions of use, no health effects are expected. Exposure to dust may cause irritation.
Chronic (Delayed): No data available

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity:
Aquatic toxicity

12.1.1 Substances
Acute (short-term) toxicity: No Data

Effect dose	Exposure time	Species	Method	Evaluation	Remark

Persistence/Degradability: Lead is persistent in soils and sediments.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment method

13.1.1 Product/packaging disposal:
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

13.1.2 Waste codes/waste designations according to EWC/AVV:
16 06 05

13.2. Additional information:
Any waste marked with an asterisk (*) is considered as a hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

SECTION 14. TRANSPORT INFORMATION

The transportation of dry batteries is Not Regulated

14.1. Land transport (CFR 49: DOT)
This product is not hazardous as defined by 49CFR 172.101 by the U.S. Department of Transportation
UN-No:
Proper shipping name:
Class(es):
Packing group:

Hazard label(s):
Special provision(s)/Exceptions:

14.2. Land transport (ADR/RID/GGVSEB):

This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

UN-No:
Proper shipping name:
Class(es):
Classification Code:
Packing group:
Hazard label(s):
Special provision(s):

Land transport (TDG):

This product is not classified as dangerous goods by the TDG standards UN- No:
Proper shipping name:
Class(es):
Packing group:
Hazard label(s):
Special provision(s):

14.3. Sea transport (IMDG-Code/GGVSee):

This product is not classified as dangerous goods by the IMO UN No:
Proper shipping name:
Class(es):
Packing group:
Marine Pollutant:
Special provision(s):

14.4. Air transport (ICAO-IATA/DGR):

This product is not classified as dangerous goods by the International Air Transport Association (IATA) or the ICAO.

UN No:
Proper shipping name:
Class(es):
Packing group:
Special provision(s):

SECTION 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the mixture

15.1.1 National regulations (Canada):

WHMIS Classification:

This product does not meet the classification criteria of the Controlled Products Regulations.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Controlled Products Regulations.

Canada DSL:

The following substances are listed on the Canadian DSL:

Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

Canada NDSL:

None of the components on this SDS are listed on the Canadian NDSL:

WHMIS: Ingredient Disclosure List

Substance	CAS No.	Wt %	Disclosure Limit %
Calcium	7440-70-2	0.002%	Not Listed
Lead	7439-92-1	89-92%	0.1%
Lead as Lead compounds		89-92%	Not Listed
Lead as Lead, inorganic compounds		89-92%	1%
Tin	7440-31-5	0.006%	1%
Antimony	7440-36-0	0.2 %	1%
Antimony as Antimony compounds		0.2%	1%
Arsenic	7440-38-2	0.003%	0.1%

CEPA: Priority Substances List

Substance	CAS No.	Wt %	Status
Calcium	7440-70-2	0.002%	Not Listed
Lead	7439-92-1	89-92%	Not Listed
Lead as Lead compounds		89-92%	Not Listed
Lead as Lead, inorganic compounds		89-92%	Not Listed
Tin	7440-31-5	0.006%	Not Listed
Antimony	7440-36-0	0.2 %	Not Listed
Antimony as Antimony compounds		0.2%	Not Listed
Arsenic	7440-38-2	0.003%	Not Listed

15.1.2 National regulations (China):

The following components are listed on the Inventory list for China:

Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

15.1.3 National regulations (European Union):

Classification:

Xi

Risk Phrases:

R36, R38

Safety Phrases:

S1/2, S26, S30, S45

The following components are listed on the EU EINECS:

Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)
None of the above mentioned components are listed on the EU ELNICS.

CLP (1272/2008) Concentration Limits

Substance	CAS	WT %	Concentration Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	2.5%<=C: Repr. Cat. 3; R62 1%<=C: Xn; R20/22 0.5%<=C: R33
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	0.25%<=C: Xn; R20/22
Arsenic	7440-38-2	0.003	Not Listed

Substance	CAS	WT %	Substances and Preparations
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	A, E, 1(except those specified elsewhere in the annex)
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	A, 1 (except tetroxide, pentoxide, trisulphide, pentasulphide and those specified elsewhere in the annex)
Arsenic	7440-38-2	0.003	Not Listed

Germany

Lead Restrictions:

Lead concentration in the blood above 300 µg/L in male employees and 100 µg/L in female employees requires additional training for personal hygiene and vigilance. Lead concentration in the blood above 350 µg/L in male employees and 200 µg/L in female employees requires additional training for personal hygiene and vigilance; Lead concentration in the blood above 400 µg/L in male employees and 300 µg/L in female employees requires additional training for personal hygiene and vigilance; See TRGS 505 for detailed regulations regarding lead and lead compounds.

Employment restrictions for employees below the age of 18 years; Employment restrictions for pregnant or breastfeeding women; Prohibited for use at home based workplaces; Restrictions apply for use of lead compounds in packaging material, drinking water systems, cars, electrical and electronical devices; See TRGS 505 for detailed regulations regarding lead and lead compounds.

Emission Limits for Inorganic Dusts

Substance	CAS	WT %	Emission Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	2.5 g/h Mass flow (class II); 0.5 mg/m^3 mass concentration (Class II)
Lead as Lead compounds		89-92	2.5 m/h Mass flow (Class II, as Pb); 0.5 mg/m^3 Mass concentration (Class II, as Pb)
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	5 g/h Mass flow (Class III); 1 mg/m^3 Mass concentration (Class III)
Antimony	7440-36-0	0.2	5 g/h Mass flow (Class III); 1 mg/m^3 Mass concentration (Class III)
Antimony as Antimony compounds		0.2	5 g/h Mass flow (Class III, as Sb); 1 mg/m^3 Mass concentration (Class III, as Sb)
Arsenic	7440-38-2	0.003	Not Listed

15.1.4 National regulations (Japan):

The following chemicals are on the Japanese ENCS:
Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

Substance	CAS	WT %	Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	0.1% weight
Lead as Lead compounds		89-92	0.1% weight
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	0.1% weight

ISHL Prevention of Lead Poisoning

Substance	CAS	WT %	Status
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Not Listed

ISHL Notifiable Substances

Substance	CAS	WT %	Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	0.1% weight
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	0.1% weight
Tin	7440-31-5	0.006	0.1% weight
Antimony	7440-36-0	0.2	0.1% weight
Antimony as Antimony compounds		0.2	0.1% weight
Arsenic	7440-38-2	0.003	0.1%weight

Air Pollution Control Law: Emission Standards for Air Pollutants

Substance	CAS	WT %	Emission Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	16-20 mg/Nm3
Lead as Lead compounds		89-92	16-20 mg/Nm3
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Not Listed

Pollutant Release Transfer Register (PRTR): Class 1 Substances

Substance	CAS	WT %	Status
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	304
Lead as Lead compounds		89-92	305 (Designated class 1 substance)
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	31
Antimony as Antimony compounds		0.2	31
Arsenic	7440-38-2	0.003	332 (Designated class 1 substance)

ISHL Working Environment Evaluation Standards: Administrative Control Levels

Substance	CAS	WT %	Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	0.05 mg/m3 ACL
Lead as Lead compounds		89-92	0.05 mg/m3 ACL (as Pb)
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	0.003 mg/m3 ACL

15.1.5 National regulations (Korea):

The following substances are listed on the Korean KECL:
Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

15.1.6 National regulations (Mexico):

Pollutant Release and Transfer Register: Reporting Emissions

Substance	CAS	WT %	Threshold Quantities
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	1 kg/yr TQ
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	1 kg/yr TQ

15.1.7 National regulations (United States):

The following substances are on the MA, NJ, and PA Right To Know Lists:
Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

The following substances are on the TSCA inventory:
Lead (7439-92-1); Antimony (7440-36-0); Tin (7440-31-5); Arsenic (7440-38-2); Calcium (7440-70-2)

OSHA: Specifically Regulated Chemicals

Substance	CAS	WT %	Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	30 µg/m^3 Action Level (Poison, See 29 CFR 1910.1025); 50 µg/m^3 TWA
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	30 µg/m^3 Action Level (Poison, See 29 CFR 1910.1025, as Pb); 50 µg/m^3 TWA (as Pb)
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Not Listed

CAA: 1990 Hazardous Air Pollutants

Substance	CAS	WT %	Limit
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	(includes any unique chemical substance that contains Lead as part of its infrastructure)
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	(includes any unique chemical substance that contains Antimony as part of its infrastructure)
Arsenic	7440-38-2	0.003	Not Listed

CERCLA/SARA
Hazardous Substances and Their Reportable Quantities

Substance	CAS	WT %	Reportable Quantity
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	10 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers)
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers)
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	1 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers); 0.454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers)

Section 302 Extremely Hazardous Substances EPCRA RQs

Substance	CAS	WT %	Reportable Quantity
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Not Listed

Section 302 Extremely Hazardous Substances TPQs

Substance	CAS	WT %	Threshold Planning Quantity
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Not Listed

RCRA

Basis for Listing: Appendix VII

Substance	CAS	WT %	Basis
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Included in waste streams: F035, F037, F038, F039, K002, K003, K005, K046, K048, K049, K051, K052, K061, K062, K064, K065, K066, K069, K086, K100, K176
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Included in waste streams: F039, K021, K161, K177
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	Included in waste streams: F032, F034, F035, F039, K031, K060, K084, K101, K102, K161, K171, K172, K176

D Series Wastes: Max Concentration of Contaminants for the Toxic Characteristic

Substance	CAS	WT %	Regulatory Level
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	5.0 mg/L
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	5.0 mg/L

Hazardous Constituents: Appendix VIII to 40 CFR 261

Substance	CAS	WT %	Status
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Hazardous constituent – no waste number
Lead as Lead compounds		89-92	Hazardous constituent – no waste number
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Hazardous constituent – no waste number
Antimony as Antimony compounds		0.2	Hazardous constituent – no waste number
Arsenic	7440-38-2	0.003	Hazardous constituent – no waste number

California: California Proposition 65

Substance	CAS	WT %	Status
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Carcinogen(initial date 10/1/92); developmental toxicity(initial date 2/27/87); 0.5 µg/day(Maximum Allowable Dose Level); 15 µg/day oral(No Significant Risk Level); female reproductive toxicity(initial date 2/27/87); male reproductive toxicity(initial date 2/27/87)
Lead as Lead compounds		89-92	Carcinogen(initial date 10/1/92)
Lead as Lead, inorganic compounds		89-92	Developmental toxicity(initial date 2/27/87)
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	0.06µg/day inhalation(No Significant Risk Level); 10µg/day except inhalation(No Significant Risk Level)

Pennsylvania
Environmental Hazard list

Substance	CAS	WT %	Regulatory Level
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	
Lead as Lead compounds		89-92	
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	
Antimony as Antimony compounds		0.2	
Arsenic	7440-38-2	0.003	

Special hazardous Substances

Substance	CAS	WT %	Regulatory Level
Calcium	7440-70-2	0.002	Not Listed
Lead	7439-92-1	89-92	Not Listed
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Not Listed
Antimony	7440-36-0	0.2	Not Listed
Antimony as Antimony compounds		0.2	Not Listed
Arsenic	7440-38-2	0.003	

Rhode Island: Hazardous Substances List

Substance	CAS	WT %	Regulatory Level
Calcium	7440-70-2	0.002	Flammable
Lead	7439-92-1	89-92	Toxic (dust and fume)
Lead as Lead compounds		89-92	Not Listed
Lead as Lead, inorganic compounds		89-92	Not Listed
Tin	7440-31-5	0.006	Toxic
Antimony	7440-36-0	0.2	Toxic
Antimony as Antimony compounds		0.2	Toxic
Arsenic	7440-38-2	0.003	Toxic; Carcinogen

SECTION 16. OTHER INFORMATION

16.1. Relevant R-, H- and EUH-phrases (number and full text):

Hazard Abbreviations:

Xn: Harmful
Xi: Irritant
C: Corrosive

Risk Phrases:

R35: Causes severe burns
R36: Irritating to eyes R38: Irritating to skin **Safety Phrases:**
S1/2: Keep locked up and out of the reach of children
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S30: Never add water to this product
S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

Hazard statements:

H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H335: May cause respiratory irritation

***Precautionary statements*:**

P102: Keep out of reach of children.
P233: Keep containers tightly closed.
P210: Keep away from heat, sparks, and open flame while charging batteries.

16.2. Further information:

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Yuasa, Inc. assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, GS Battery (U.S.A.) Inc assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.