Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 10/07/2014 Date of issue: 09/16/2014

# Revision Date: 10/07/2014 Date of issue: 09/16/2014 Version: 1.0 SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

Product Form: Mixture

Product Name: Wrought Aluminum Products, 6xxx Series Alloys

**Other means of identification:** 6xxx Series Alloys including, but not limitted to: 6005, 6013, 6042, 6060, 6061 6063, 6066, 6070, 6082, 6101, 6105, 6351, 6463, 6005A, 6061-2, 6061MG, 6063-1, 6063-2, 6063HS, C33E, C57B, HF25, MC61, PT61, RA61, RX82,

SF60

### 1.2. Intended Use of the Product

Use of the substance/mixture: Various extruded aluminum parts and products and cast billet.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Sapa Extrusions Americas

9600 West Bryn Mawr Ave, Suite 250

Rosemont, IL 60018 Phone: 800-233-3165

### 1.4. Emergency Telephone Number

Emergency Number : USA: Chemtrec: 1-800-424-9300 or 1-703-527-3887

### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1. Classification of the Substance or Mixture

### **Classification (GHS-US)**

Not classified

#### 2.2. Label Elements

### **GHS-US Labeling**

No labeling applicable

### 2.3. Other Hazards

This product is physiologically inert in its massive form. However, user-generated dust and/or fumes may pose a physiological hazard if inhaled or ingested. Avoid inhalation of metal dusts and fumes. May cause an influenza-like illness. Avoid skin and eye contact with dusts to prevent mechanical irritation. User-generated dust is easily ignited and difficult to extinguish. This product contains components that are environmentally hazardous and small chips, fine turnings, and dust from processing may be toxic to aquatic life.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Aluminum	(CAS No) 7429-90-5	> 89.9	Comb. Dust Flam. Sol. 1, H228 Water-react. 2, H261
Zinc	(CAS No) 7440-66-6	< 2.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Magnesium	(CAS No) 7439-95-4	< 2.1	Comb. Dust Flam. Sol. 1, H228 Self-heat. 2, H252 Water-react. 2, H261 Acute Tox. 3 (Oral), H301
Silicon	(CAS No) 7440-21-3	< 1.8	Comb. Dust
Manganese	(CAS No) 7439-96-5	< 1.5	Comb. Dust
Copper	(CAS No) 7440-50-8	< 1.3	Comb. Dust Aquatic Acute 1, H400 Aquatic Chronic 3, H412

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Iron	(CAS No) 7439-89-6	< 1.1	Comb. Dust Flam. Sol. 1, H228 Self-heat. 1, H251
Chromium	(CAS No) 7440-47-3	< 0.5	Not classified
Lead	(CAS No) 7439-92-1	0 - 0.05	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Repr. 1A, H360 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

### **SECTION 4: FIRST AID MEASURES**

### 4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.

**First-aid Measures After Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures After Skin Contact**: Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance.

**First-aid Measures After Eye Contact**: Removal of solidified molten material from the eyes requires medical assistance. Immediately rinse with water for a prolonged period (at least 15 minutes) while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Ingestion**: Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Under normal conditions of use not expected to present a significant hazard. During processing or physical alteration, flakes or powder cause irritation of the respiratory tract, eyes, skin, and are harmful. Molten material may release toxic, and irritating fumes.

**Symptoms/Injuries After Inhalation:** During processing, the most significant route of exposure is by the inhalation (breathing) of fumes. If fumes are inhaled, they can cause a condition commonly known as metal fume fever with symptoms which resemble influenza; Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur.

**Symptoms/Injuries After Skin Contact:** Causes severe skin burns. Contact with fumes or metal powder will irritate skin. Contact with hot, molten metal will cause thermal burns. Dust may cause irritation in skin folds or by contact in combination with tight clothing. Mechanical damage via flying particles and chipped slag is possible.

**Symptoms/Injuries After Eye Contact:** During metal processing, dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes. Mechanical damage via flying particles and chipped slag is possible.

Symptoms/Injuries After Ingestion: Ingestion is not considered a potential route of exposure.

Chronic Symptoms: Inhalation of iron oxide fumes undergoing decomposition may cause irritation and flu-like symptoms, otherwise iron oxide is not hazardous. Aluminum: Inhalation of finely divided aluminum powder may cause pulmonary fibrosis. Zinc: Prolonged exposure to high concentrations of zinc fumes may cause "zinc shakes", an involuntary twitching of the muscles. Otherwise, zinc is non-toxic. Chromium: Certain hexavalent chromium compounds have been demonstrated to be carcinogenic on the basis of epidemiological investigations on workers and experimental studies in animals. Increased incidences of respiratory cancer have been found in chromium (VI) workers. There is an increased incidence of lung cancer in industrial workers exposed to chromium (VI) compounds. Please refer to IARC volume 23 for a more detailed discussion. Silicon: Can cause chronic bronchitis and narrowing of the airways. Manganese: Chronic exposure can cause inflammation of the lung tissue, scarring the lungs (pulmonary fibrosis). Anemia. Copper: Overexposure to fumes may cause metal fume fever (chills, muscle aches, nausea, fever, dry throat, cough, weakness, lassitude); metallic or sweet taste; discoloration of skin and hair. Tissue damage of mucous membranes may follow chronic dust exposure. Lead: Exposure can result in lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension.

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### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### **SECTION 5: FIRE-FIGHTING MEASURES**

### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use water when molten material is involved, may react violently or explosively on contact with water.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Dust, chips, or ribbons can be ignited more easily, by an ignition source, by improper machining, or by spontaneous combustion if finely divided and damp.

**Explosion Hazard:** Product is not explosive.

Reactivity: Stable at ambient temperature and under normal conditions of use.

#### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Do not breathe fumes from fires or vapors from decomposition.

**Protection During Firefighting:** Firefighters must use full bunker gear including NIOSH-approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion and decomposition products.

Other Information: Refer to Section 9 for flammability properties.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Do not handle until all safety precautions have been read and understood. Avoid breathing (vapors, dust, fumes).

### 6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Avoid creating or spreading dust.

### **6.1.2.** For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Eliminate ignition sources. Evacuate unnecessary personnel, isolate, and ventilate area.

#### **6.2.** Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Avoid generation of dust during clean-up of spills.

**Methods for Cleaning Up:** Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: HANDLING AND STORAGE**

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Do not allow water (or moist air) contact with this material. Product dust is combustible. Use care during processing to minimize generation of dust.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in original container. Store in dry protected location to prevent any moisture contact. Keep away from heat and flame.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers. Water, humidity. Alkalis. Corrosive substances in contact with metals may produce flammable hydrogen gas.

**Incompatible Materials:** Keep away from any possible contact with water, because of violent reaction and possible flash fire. **Special Rules on Packaging:** Store in a closed container.

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### 7.3. Specific End Use(s)

Various extruded aluminum parts and products and cast billet.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

Aluminum (7	429-90-5)	
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust)
		5 mg/m³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
		5 mg/m³ (respirable fraction)
Silicon (7440	-21-3)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust)
		5 mg/m³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
		5 mg/m³ (respirable fraction)
Copper (7440	)-50-8)	
USA ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³ (fume)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³ (dust and mist)
		0.1 mg/m³ (fume)
USA IDLH	US IDLH (mg/m³)	100 mg/m³ (dust, fume and mist)
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.1 mg/m³ (fume)
		1 mg/m³ (dust and mist)
Manganese (	7439-96-5)	
USA ACGIH	ACGIH TWA (mg/m³)	0.02 mg/m³ (respirable fraction)
		0.1 mg/m³ (inhalable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³ (fume)
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3 mg/m³
USA IDLH	US IDLH (mg/m³)	500 mg/m³
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	5 mg/m³ (fume)
Chromium (7	440-47-3)	
USA ACGIH	ACGIH TWA (mg/m³)	0.5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.5 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m³)	250 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
Lead (7439-9	Lead (7439-92-1)	
USA ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.050 mg/m³
USA IDLH	US IDLH (mg/m³)	100 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 μg/m³

### 8.2. Exposure Controls

**Appropriate Engineering Controls** 

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Avoid dust production. Avoid creating or spreading dust. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

**Personal Protective Equipment** 

: Safety glasses. Gloves. Insufficient ventilation: wear respiratory protection. Protective clothing.









**Materials for Protective Clothing** 

: With molten material wear thermally protective clothing.

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: Wear chemically resistant protective gloves. If material is hot, wear thermally **Hand Protection** 

resistant protective gloves.

**Eve Protection** Chemical goggles or face shield. Face shield.

Skin and Body Protection : Wear suitable protective clothing.

**Respiratory Protection** : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever

exposure may exceed established Occupational Exposure Limits. Wear approved

mask.

**Environmental Exposure Controls** : Do not allow the product to be released into the environment.

**Consumer Exposure Controls** Do not eat, drink or smoke during use.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### **Information on Basic Physical and Chemical Properties**

**Physical State** : Solid

Silvery: plate, rod, bar, extrusion, log, forgings, etc. **Appearance** 

Odor

**Odor Threshold** : Not aplicable : Not applicable **Evaporation Rate** : No data available

**Melting Point** : 1030 - 1210 °F (554-654 °C)

**Freezing Point** No data available **Boiling Point** : Not applicable **Flash Point** : No data available **Auto-ignition Temperature** : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) No data available Vapor Pressure : Not applicable Relative Vapor Density at 20 °C : No data available

**Relative Density** : No data available

: 2.69-2.72 g/cm<sup>3</sup> (0.097-0.099 lb/ft<sup>3</sup>) Density

: Water: None Solubility Partition Coefficient: N-octanol/water : Not applicable : No data available Viscosity

9.2. **Other Information** No additional information available

## **SECTION 10: STABILITY AND REACTIVITY**

- 10.1. Reactivity: Stable at ambient temperature and under normal conditions of use.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **Conditions to Avoid:** Protect from moisture. Incompatible materials. 10.4.
- 10.5. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Water, humidity. Alkalis. Corrosive substances in contact with metals may produce flammable hydrogen gas.
- Hazardous Decomposition Products: Under conditions of fire this material may produce: Oxides of iron. Oxides of copper. Oxides of aluminum. Oxides of zinc.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Information On Toxicological Effects** 11.1.

Acute Toxicity: Not classified

Magnesium (7439-95-4)		
LD50 Oral Rat	230 mg/kg	
Iron (7439-89-6)		
LD50 Oral Rat	98.6 g/kg	
Lead (7439-92-1)		
ATE (Oral)	500.00 mg/kg body weight	

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ATE (Dust/Mist)	1.50 mg/l/4h

Skin Corrosion/Irritation: Not classified

**pH:** Not applicable

Serious Eye Damage/Irritation: Not classified

**pH:** Not applicable

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Chromium (7440-47-3)	
IARC group 3	
Lead (7439-92-1)	
IARC group 2A	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: During processing, the most significant route of exposure is by the inhalation (breathing) of fumes. If fumes are inhaled, they can cause a condition commonly known as metal fume fever with symptoms which resemble influenza; Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur.

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**Symptoms/Injuries After Eye Contact:** During metal processing, dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes. Mechanical damage via flying particles and chipped slag is possible.

Symptoms/Injuries After Ingestion: Ingestion is not considered a potential route of exposure.

Chronic Symptoms: Inhalation of iron oxide fumes undergoing decomposition may cause irritation and flu-like symptoms, otherwise iron oxide is not hazardous. Aluminum: Inhalation of finely divided aluminum powder may cause pulmonary fibrosis. Zinc: Prolonged exposure to high concentrations of zinc fumes may cause "zinc shakes", an involuntary twitching of the muscles. Otherwise, zinc is non-toxic. Chromium: Certain hexavalent chromium compounds have been demonstrated to be carcinogenic on the basis of epidemiological investigations on workers and experimental studies in animals. Increased incidences of respiratory cancer have been found in chromium (VI) workers. There is an increased incidence of lung cancer in industrial workers exposed to chromium (VI) compounds. Please refer to IARC volume 23 for a more detailed discussion. Silicon: Can cause chronic bronchitis and narrowing of the airways. Manganese: Chronic exposure can cause inflammation of the lung tissue, scarring the lungs (pulmonary fibrosis). Anemia. Copper: Overexposure to fumes may cause metal fume fever (chills, muscle aches, nausea, fever, dry throat, cough, weakness, lassitude); metallic or sweet taste; discoloration of skin and hair. Tissue damage of mucous membranes may follow chronic dust exposure. Lead: Exposure can result in lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; encephalopathy; kidney disease; hypertension.

### **SECTION 12: ECOLOGICAL INFORMATION**

### 12.1. Toxicity

Zinc (7440-66-6)	
LC50 Fish 1	2.16 - 3.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.139 - 0.908 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.211 - 0.269 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
Copper (7440-50-8)	
LC50 Fish 1	<= 0.0068 (0.0068 - 0.0156) mg/l (Exposure time: 96 h - Species: Pimephales
	promelas)
EC50 Daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Other Aquatic Organisms 1	0.0426 (0.0426 - 0.0535) mg/l (Exposure time: 72 h - Species: Pseudokirchneriella

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	subcapitata [static])	
LC 50 Fish 2	0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 Other Aquatic Organisms 2	0.031 (0.031 - 0.054) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella	
	subcapitata [static])	
Manganese (7439-96-5)		
NOEC chronic fish	3.6 mg/l (Exposure time: 96h; Species: Oncorhynchus mykiss)	
Lead (7439-92-1)		
LC50 Fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])	
EC50 Daphnia 1	600 μg/l (Exposure time: 48 h - Species: water flea)	
LC 50 Fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])	

### 12.2. Persistence and Degradability

Copper (7440-50-8)	
Persistence and Degradability	Not readily biodegradable.

#### 12.3. Bioaccumulative Potential

No additional information available

### 12.4. Mobility in Soil

No additional information available

### 12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

### 13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

**Additional Information:** Recycle the material as far as possible. **Ecology – Waste Materials:** Avoid release to the environment.

### **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT
 14.2. In Accordance with IMDG
 14.3. In Accordance with IATA
 Not regulated for transport
 Not regulated for transport

### **SECTION 15: REGULATORY INFORMATION**

### 15.1 US Federal Regulations

15.1 US rederal Regulations		
Aluminum (7429-90-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
SARA Section 313 - Emission Reporting	1.0 % (dust or fume only)	
Silicon (7440-21-3)		
Listed on the United States TSCA (Toxic Substances Conti	rol Act) inventory	
Zinc (7440-66-6)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
SARA Section 313 - Emission Reporting 1.0 % (dust or fume only)		
Copper (7440-50-8)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
SARA Section 313 - Emission Reporting 1.0 %		
Magnesium (7439-95-4)		
Listed on the United States TSCA /Taxis Substances Control Act\ inventory		

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Iron (7439-89-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Manganese (7439-96-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

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Chromium (7440-47-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
SARA Section 313 - Emission Reporting 1.0 %		
Lead (7439-92-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
SARA Section 313 - Emission Reporting 0.1 %		

#### 15.2 **US State Regulations**

Lead (7439-92-1)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.
U.S California - Proposition 65 - Developmental	WARNING: This product contains chemicals known to the State of
Toxicity	California to cause birth defects.
U.S California - Proposition 65 - Reproductive	WARNING: This product contains chemicals known to the State of
Toxicity - Female	California to cause (Female) reproductive harm.
U.S California - Proposition 65 - Reproductive	WARNING: This product contains chemicals known to the State of
Toxicity - Male	California to cause (Male) reproductive harm.

### Aluminum (7429-90-5)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

### Silicon (7440-21-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

### Zinc (7440-66-6)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

### Copper (7440-50-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

### Magnesium (7439-95-4)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

### Manganese (7439-96-5)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

### Chromium (7440-47-3)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances
- U.S. Pennsylvania RTK (Right to Know) List

### Lead (7439-92-1)

U.S. - Massachusetts - Right To Know List

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- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 10/07/2014

Other Information : This document has been prepared in accordance with the SDS

requirements of the OSHA Hazard Communication Standard 29 CFR

1910.1200.

### **GHS Full Text Phrases:**

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Comb. Dust	Combustible Dust
Flam. Sol. 1	Flammable solids Category 1
Repr. 1A	Reproductive toxicity Category 1A
Self-heat. 1	Self-heating substances and mixtures Category 1
Self-heat. 2	Self-heating substances and mixtures Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
Water-react. 2	Substances and mixtures which in contact with water emit flammable
	gases Category 2
H228	Flammable solid
	May form combustible dust concentrations in air
H251	Self-heating: may catch fire
H252	Self-heating in large quantities; may catch fire
H261	In contact with water releases flammable gases
H301	Toxic if swallowed
H302	Harmful if swallowed
H332	Harmful if inhaled
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

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