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: 09/17/2014

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Wrought Aluminum Products, 3xxx Series Alloys

Other means of identification: 3xxx Series Alloys including, but not limitted to: 3026, 3102, 3110, C13C, C19E, C47B, C47D,

C76S, MN427, MN428

1.2. Intended Use of the Product

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

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	> 92	Comb. Dust Flam. Sol. 1, H228 Water-react. 2, H261
Magnesium	(CAS No) 7439-95-4	< 2.8	Comb. Dust Flam. Sol. 1, H228 Self-heat. 2, H252 Water-react. 2, H261 Acute Tox. 3 (Oral), H301
Manganese	(CAS No) 7439-96-5	< 2	Comb. Dust
Silicon	(CAS No) 7440-21-3	< 1.9	Comb. Dust
Zinc	(CAS No) 7440-66-6	< 1.8	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Chromium	(CAS No) 7440-47-3	< 0.6	Not classified

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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
Nickel	(CAS No) 7440-02-0	0 - 0.05	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

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: 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. Inhalation of Nickel compounds has been shown in studies to provide an increased incidence of cancer of the nasal cavity, lung and possibly larynx in nickel refinery workers. Nickel: May cause a form of dermatitis known as nickel itch and intestinal irritation, which may cause disorders, convulsions and asphyxia. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Aluminum (7429-90-5)			
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (respirable fraction)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust)	
OSA NIOSII	WOSH KEE (TWA) (Mg/M)	5 mg/m³ (respirable dust)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)	
OSA OSHA		5 mg/m³ (respirable fraction)	
Silicon (7440	-21-3)	To may me transfer masses,	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust)	
	(, (g,)	5 mg/m³ (respirable dust)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)	
	,,,,,,	5 mg/m³ (respirable fraction)	
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/m ³	
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/m³	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.5 mg/m³	
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	
Nickel (7440-02-0)			
USA ACGIH	ACGIH TWA (mg/m³)	1.5 mg/m³ (inhalable fraction)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.015 mg/m³	
USA IDLH	US IDLH (mg/m³)	10 mg/m³	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/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 Hand Protection

Eye Protection

- : With molten material wear thermally protective clothing.
- : Wear chemically resistant protective gloves. If material is hot, wear thermally resistant protective gloves.

: Chemical goggles or face shield. Face shield.

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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

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

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

Odor : None

Odor Threshold: Not applicablepH: Not applicableEvaporation Rate: No data available

Melting Point : 1150 - 1220 °F (621-660 °C)

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

Density : $2.70-2.75 \text{ g/cm}^3 (0.098-0.099 \text{ lb/ft}^3)$

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

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.
- **10.4. Conditions to Avoid:** Protect from moisture. Incompatible materials.
- **10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers. Water, humidity. Alkalis. Corrosive substances in contact with metals may produce flammable hydrogen gas.
- **10.6. Hazardous Decomposition Products:** Under conditions of fire this material may produce: Oxides of aluminum. Oxides of zinc.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Magnesium (7439-95-4)		
LD50 Oral Rat	230 mg/kg	
ATE (Oral)	230.00 mg/kg body weight	
Lead (7439-92-1)		
ATE (Oral)	500.00 mg/kg body weight	
ATE (Dust/Mist)	1.50 mg/l/4h	
Nickel (7440-02-0)		
LD50 Oral Rat	> 9000 mg/kg	

Skin Corrosion/Irritation: Not classified

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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.	
Nickel (7440-02-0)		
IARC group	2B	
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 Ingestion: Ingestion is not considered a potential route of exposure.

Chronic Symptoms: 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. Inhalation of Nickel compounds has been shown in studies to provide an increased incidence of cancer of the nasal cavity, lung and possibly larynx in nickel refinery workers. Nickel: May cause a form of dermatitis known as nickel itch and intestinal irritation, which may cause disorders, convulsions and asphyxia. 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])
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)

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LC 50 Fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Nickel (7440-02-0)	
LC50 Fish 1	100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 Daphnia 1	13 (13 - 200) μg/l (Exposure time: 48h - Species: Ceriodaphnia dubia [static])
LC 50 Fish 2	1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 2	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Other Aquatic Organisms 2	0.174 (0.174 - 0.311) mg/l (Exposure time: 96 h - Species: Pseudokirchneriella
	subcapitata [static])

12.2. Persistence and Degradability

No additional information available

12.3. **Bioaccumulative Potential**

No additional information available

Mobility in Soil 12.4.

No additional information available

12.5. **Other Adverse Effects**

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods **13.1.**

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

SECTION 15: REGULATORY INFORMATION

15.1 **US Federal 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 Control 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)

Magnesium (7439-95-4)

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 %

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 %

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Nickel (7440-02-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on United States SARA Section 313		
RQ (Reportable quantity, section 304 of EPA's List of 100 lb (only applicable if particles are < 100 μm)		
Lists):		
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.
Nickel (7440-02-0)	
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of
	California to cause cancer.

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

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
- 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

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Nickel (7440-02-0)

- 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

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
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Flam. Sol. 1	Flammable solids Category 1
Repr. 1A	Reproductive toxicity Category 1A
Self-heat. 2	Self-heating substances and mixtures Category 2
Skin Sens. 1	Skin sensitization Category 1
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
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
H317	May cause an allergic skin reaction
H332	Harmful if inhaled
H351	Suspected of causing cancer
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)

09/17/2014 EN (English US) 9/9