Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

# \* \* \* Section 1 - PRODUCT AND COMPANY IDENTIFICATION\* \* \*

# Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

#### Manufacturer Information

Bon L Manufacturing Company 25 Bonnell St. Newnan, GA 30263

Emergency # 1-800-424-9300 (NORTH AMERICA)

### **Chemical Family**

metal, alloy

# \*\*\* Section 2 - HAZARDS IDENTIFICATION\*\*\*

#### EMERGENCY OVERVIEW

#### Physical Form: solid

Health Hazards: harmful if inhaled, respiratory tract irritation

#### POTENTIAL HEALTH EFFECTS

#### Inhalation

**Short Term:** Dust particles or fumes may cause irritation if product is subjected to an activity such as sawing, drilling, grinding, welding, buffing, etc. that generates dust or fumes.

**Long Term:** Dust particles or fumes may cause irritation if product is subjected to an activity such as sawing, drilling, grinding, welding, buffing, etc. that generates dust or fumes.

Skin

Short Term: No hazard expected. Long Term: No hazard expected.

Eye

Short Term: No hazard expected.

Long Term: No hazard expected.

Ingestion

Short Term: No hazard expected.

Long Term: No hazard expected.

# \* \* \* Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\* \* \*

CAS	Component	Percent	Symbol(s)	Risk Phrase(s)
7429-90-5	ALUMINUM AS METAL	90.0 - 99.0	F	R:11-15
	231-072-3			
Not Available	POLYURETHANE ADHESIVE	0 - 10		
1314-13-2	ZINC OXIDE	0.01 - 5.0	N	R:50/53
	215-222-5			
1309-48-4	MAGNESIUM OXIDE	0.1 - 1.5		
	215-171-9			
7440-21-3	SILICON	0.2 - 1.0		
	231-130-8			

#### Page 2 of 13

# Safety Data Sheet

## Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

#### **Component Related Regulatory Information**

This product may be regulated, have exposure limits or other information identified as the following: Aluminium compounds, Aluminum, welding fumes, Zinc compounds, magnesium inorganic compounds.

# \* \* \* Section 4 - FIRST AID MEASURES\* \* \*

#### Inhalation

It is unlikely that emergency treatment will be required. This product cannot be inhaled unless it is subjected to an activity such as sawing, drilling, grinding, welding, buffing, etc. that generates dust or fumes.

#### Skin

If cut by metal, get medical attention, if needed.

#### Eyes

If a piece of metal gets into the eye, get medical attention immediately.

#### Ingestion

If a piece of metal is swallowed, get medical attention, if needed.

# \* \* \* Section 5 - FIRE FIGHTING MEASURES\* \* \*

See Section 9 for Flammability Properties

#### NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Flammable Properties

No hazard expected.

#### Extinguishing Media

No hazard expected.

#### Fire Fighting Measures

No hazard expected.

#### **Thermal Decomposition Products**

Combustion: acid halides, oxides of carbon, hydrocarbons, hydrogen cyanide, oxides of nitrogen

# \* \* \* Section 6 - ACCIDENTAL RELEASE MEASURES\* \* \*

#### Occupational spill/release

Pick up the metal.

# \* \* \* Section 7 - HANDLING AND STORAGE\* \* \*

#### **Handling Procedures**

Machining or tooling aluminum extrusions may create sharp edges capable of cutting or penetrating flesh. Wear gloves, eye protection, and skin protection when working with aluminum extrusions.

#### **Storage Procedures**

Store and handle in accordance with all current regulations and standards. Stock piles, scrap extrusions and cuttings may create trip, slip, or fall hazards if allowed to accumulate. Keep work areas clear and orderly. Keep separated from incompatible substances.

### Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

# \* \* \* Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\* \* \*

## Component Exposure Limits

ALUMINUM AS	S METAL (7429-90-5)
ACGIH:	1 mg/m3 TWA (respirable fraction)
NIOSH:	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
OSHA (US):	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Mexico:	10 mg/m3 TWA LMPE-PPT (dust)
ZINC OXIDE (1	314-13-2)
ACGIH:	2 mg/m3 TWA (respirable fraction)
	10 mg/m3 STEL (respirable fraction)
NIOSH:	5 mg/m3 TWA (dust and fume)
	10 mg/m3 STEL (fume)
	15 mg/m3 Ceiling (dust)
	500 mg/m3 IDLH
OSHA (US):	5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Mexico:	5 mg/m3 TWA LMPE-PPT (fume); 10 mg/m3 TWA LMPE-PPT (dust)
	10 mg/m3 STEL [LMPE-CT] (fume)
MAGNESIUM	OXIDE (1309-48-4)
ACGIH:	10 mg/m3 TWA (inhalable fraction)
NIOSH:	750 mg/m3 IDLH (fume)
OSHA (US):	15 mg/m3 TWA (fume, total particulate)
Mexico:	10 mg/m3 TWA LMPE-PPT (as Mg, fume)
SILICON (7440	)-21-3)
NIOSH:	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
OSHA (US):	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Mexico:	10 mg/m3 TWA LMPE-PPT (inhalable fraction)
	20 mg/m3 STEL [LMPE-CT]

#### Ventilation

Based on available information, additional ventilation is not required. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

#### PERSONAL PROTECTIVE EQUIPMENT

#### **Eyes/Face**

Use safety glasses.

#### Protective Clothing

Wear suitable protective clothing.

#### **Glove Recommendations**

Wear suitable gloves.

### **Respiratory Protection**

No respirator is required under normal conditions of use.

# \* \* \* Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\* \* \*

Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

SDS ID: 00223720

Physical State:	Solid	Appearance:	Not available
Physical Form:	solid	Odor:	Not Available
Odor Threshold:	Not applicable	Melting Point:	593 - 704 °C
Boiling Point:	Not applicable	Flash Point:	Not applicable
Vapor Pressure:	Not applicable	Vapor Density (air = 1):	Not applicable
Density:	Not available	Specific Gravity (water = 1):	2.5 - 2.9
Water Solubility:	insoluble	Coeff. Water/Oil Dist:	Not applicable

# \* \* \* Section 10 - STABILITY AND REACTIVITY\* \* \*

#### Chemical Stability

Stable at normal temperatures and pressure.

#### **Conditions to Avoid**

Avoid generating dust or fumes.

#### Materials to Avoid

acids, bases, oxidizing materials

#### **Thermal Decomposition Products**

**Combustion:** acid halides, oxides of carbon, hydrocarbons, hydrogen cyanide, oxides of nitrogen

Thermal decomposition products: hydrogen cyanide, hydrogen chloride, oxides of carbon, nitrogen.

#### Possibility of Hazardous Reactions

Will not polymerize.

# \* \* \* Section 11 - TOXICOLOGICAL INFORMATION\* \* \*

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

ZINC OXIDE (1314-13-2) Oral LD50 Rat >5000 mg/kg SILICON (7440-21-3) Oral LD50 Rat 3160 mg/kg

### Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

#### **RTECS Acute Toxicity (selected)**

The components of this material have been reviewed, and RTECS publishes the following endpoints:

#### ZINC OXIDE (1314-13-2)

Inhalation: 2500 mg/m3 Inhalation Mouse LC50

Oral: 7950 mg/kg Oral Mouse LD50

SILICON (7440-21-3)

**Oral:** 3160 mg/kg Oral Rat LD50

#### Acute Toxicity Level

ZINC OXIDE (1314-13-2)

Toxic: inhalation

Slightly Toxic: ingestion

#### SILICON (7440-21-3)

Moderately Toxic: ingestion

#### **Component Carcinogenicity**

ALUMINUM AS METAL (7429-90-5)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### MAGNESIUM OXIDE (1309-48-4)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

#### **RTECS** Irritation

The components of this material have been reviewed, and RTECS publishes the following endpoints:

#### ZINC OXIDE (1314-13-2)

500 mg/24 hour Eyes Rabbit mild; 500 mg/24 hour Skin Rabbit mild

#### SILICON (7440-21-3)

3 mg Eyes Rabbit mild

#### Local Effects

#### ZINC OXIDE (1314-13-2)

Irritant: inhalation

Aluminum itself has not been evaluated by IARC. However, aluminum production has been evaluated as IARC Group 1 (Human Sufficient Evidence). There is sufficient evidence that certain exposures occurring during aluminum production cause cancer.

#### Medical Conditions Aggravated by Exposure

respiratory disorders, Alzheimer's disease, kidney disorders, skin disorders, eye disorders

#### **RTECS Tumorigenic**

The components of this material have been reviewed, and RTECS publishes the following endpoints: **MAGNESIUM OXIDE (1309-48-4)** 

480 mg/kg Intratracheal Hamster TDLo (30 week)

#### **RTECS Mutagenic**

The components of this material have been reviewed, and RTECS publishes the following endpoints:

## ZINC OXIDE (1314-13-2)

3000 ppm Escherichia coli; 5300 ug/m3/3 hour- 6 day(s) guinea pig; 1 mg/L hamster; 1 mg/L hamster; 300 ug/L hamster; 100 umol/L/30 hour human; 100 ug/m3 rat

#### **RTECS Reproductive Effects**

The components of this material have been reviewed, and RTECS publishes the following endpoints: **ALUMINUM AS METAL (7429-90-5)** 

1260 mg/kg Oral Mouse TDLo (Multigeneration); 67.5 mg/kg Unreported Rabbit TDLo (pregnant 2-27 day(s))

Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

ZINC OXIDE (1314-13-2)

6846 mg/kg Oral Rat TDLo (pregnant 1-22 day(s))

#### **Additional Data**

Interactions with drugs may occur.

Elevated aluminum levels have been associated with Alzheimer's disease, neurofibrillary degeneration, and anemia. Nephrotoxicity has been demonstrated with excessive exposure to silicon.

### HEALTH EFFECTS

#### Inhalation - Acute Exposure

POLYURETHANE ADHESIVE: No data available.

#### Inhalation - Chronic Exposure

POLYURETHANE ADHESIVE: No data available.

#### Skin Contact - Acute Exposure

POLYURETHANE ADHESIVE: No known effects.

#### Skin Contact - Chronic Exposure

POLYURETHANE ADHESIVE: No data available.

#### **Skin Contact - Other Toxicity Information**

Remove particles by thoroughly washing with soap and water.

#### **Eye Contact - Acute Exposure**

POLYURETHANE ADHESIVE: May cause mechanical irritation.

#### Eye Contact - Chronic Exposure

POLYURETHANE ADHESIVE: No data available.

### Eye - Other Toxicity Information

Immediately flush eyes with water for at least 15 minutes.

#### Ingestion - Acute Exposure

ALUMINUM, METALLIC, POWDER: Large doses may cause gastrointestinal irritation, vomiting and diarrhea. Aluminum is poorly absorbed and may decrease absorption of other substances. Neurotoxic effects may occur in persons with impaired kidney function or chronic renal failure. ZINC OXIDE: The greatest danger from ingestion may be intense gastroenteritis, with nausea, diarrhea, or constipation. MAGNESIUM OXIDE: Magnesium salts are generally so slowly absorbed that oral administration causes nothing more than purging. If evacuation fails, mucosal irritation and absorption may occur. If ingested in sufficient quantities, may cause gastrointestinal disturbances. Symptoms may include irritation, nausea, vomiting, abdominal pain, and diarrhea. Systemically, magnesium may produce central nervous system depression, abolition of reflexes, and death from respiratory paralysis. SILICON: May cause digestive tract irritation.

#### Ingestion - Chronic Exposure

POLYURETHANE ADHESIVE: No data available.

# \* \* \* Section 12 - ECOLOGICAL INFORMATION\* \* \*

#### **Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components.

# \* \* \* Section 13 - DISPOSAL CONSIDERATIONS\* \* \*

#### **Disposal Methods**

Dispose in accordance with all applicable regulations. Recycle if possible.

Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

#### **Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components.

# \* \* \* Section 14 - TRANSPORT INFORMATION\* \* \*

#### **US DOT Information**

No Classification assigned.

#### **TDG Information**

No Classification assigned.

#### **ADR Information**

No Classification assigned.

#### ADR Tunnel Code Restrictions

This list contains tunnel restriction codes for those substances and/or chemically related entries which are found in chapter 3.2 of the ADR regulations.

#### ALUMINUM AS METAL (7429-90-5)

E [UN1309] (III, coated); E [UN1309] (II, coated); D/E [UN1396] (II, uncoated); E [UN1396] (III, uncoated)

#### **RID** Information

No Classification assigned.

#### IATA Information

No Classification assigned.

#### **ICAO** Information

No Classification assigned.

#### IMDG Information

No Classification assigned.

# \* \* \* Section 15 - REGULATORY INFORMATION\* \* \*

#### **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

#### ALUMINUM AS METAL (7429-90-5)

SARA 313: 1.0 % de minimis concentration (dust or fume only)

#### ZINC OXIDE (1314-13-2)

SARA 313: 1.0 % de minimis concentration (Chemical Category N982, related to Zinc compounds)

#### SARA Section 311/312 (40 CFR 370 Subparts B and C)

#### Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No Reactive: No

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
ALUMINUM AS METAL	7429-90-5	Yes	Yes	Yes	Yes	Yes
ZINC OXIDE	1314-13-2	Yes	Yes	Yes	Yes	Yes
MAGNESIUM OXIDE	1309-48-4	Yes	Yes	Yes	Yes	Yes
SILICON	7440-21-3	No	Yes	Yes	Yes	Yes

Not regulated under California Proposition 65

Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

### Canada

### Canada WHMIS

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List: **ALUMINUM AS METAL (7429-90-5)** 

1 %

#### ZINC OXIDE (1314-13-2)

1 %

### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on SDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

ALUMINUM AS METAL (7429-90-5)

WHMIS IDL: 1 % ZINC OXIDE (1314-13-2) WHMIS IDL: 1 % MAGNESIUM OXIDE (1309-48-4)

WHMIS IDL: 1 %

## Germany Water Classification

ALUMINUM AS METAL (7429-90-5)

ID Number 1443, not considered hazardous to water

ZINC OXIDE (1314-13-2)

ID Number 2187, hazard class 2 - hazard to waters

#### MAGNESIUM OXIDE (1309-48-4)

ID Number 5208, hazard class 1 - low hazard to waters

### EU Marking and Labelling

#### Symbols

 ${\bf N}$  Dangerous for the environment

#### **Risk Phrases**

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Component Analysis - Inventory

Component	CAS	US	EU	AU	PH	JP	KR	CN	NZ	DSL	NDS
											L
ALUMINUM AS	7429-90-5	Yes	EIN	Yes	Yes	No	Yes	Yes	Yes	Yes	No
METAL											
ZINC OXIDE	1314-13-2	Yes	EIN	Yes	No						
MAGNESIUM	1309-48-4	Yes	EIN	Yes	No						
OXIDE											
SILICON	7440-21-3	Yes	EIN	Yes	Yes	No	Yes	Yes	Yes	Yes	No

### Globally Harmonized System of Classification and Labelling (GHS)

The listed component(s) of this material have been checked for country-specific published classifications according to the Globally Harmonized System of Classification and Labelling (GHS). The results of the queries are displayed below. Please see the individual country listings, as additional interpretations or reference information may be available.

### Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

For a reference list of H- or P-statements, please visit ChemADVISOR's website at www.chemadvisor.com\sdsoncommand\ghs H&Pphrases.html.

#### Australia GHS Classifications

No published information available. This material may be hazardous according to published criteria for classification.

#### **EU GHS Classifications**

Classifications below according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP).

#### ALUMINUM AS METAL (7429-90-5)

 Flammable Solids:
 Flam. Sol. 1 Hazard Statement: H228 Notes: T

 Substances and
 Water-react. 2 Hazard Statement: H261 Notes: T

 Mixtures Which, In
 Contact With Water,

 Emit Flammable
 Gases:

 EU Labelling:
 Pictogram: GHS02 Signal Word: Dgr Hazard Statement: H261,H228 Notes: T

ZINC OXIDE (1314-13-2)

**EU Labelling:** Pictogram: GHS09 Signal Word: Wng Hazard Statement: H410

#### Indonesia GHS Classifications

No published information available. This material may be hazardous according to published criteria for classification.

#### **Japan GHS Classifications**

Classifications below published by Japan's Chemicals Classification Program according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

ALUMINUM AS METAL (7429-	90-5)
Substances and Mixtures	Category: 2 Symbol: Flame Signal: Danger Statement: In contact with water
Which, In Contact With Water,	releases flammable gases (classification category depends on a prescribed
Emit Flammable Gases:	test since the result would be different based on the substance's purity, form of
	particle and particle size); Category: 3 Symbol: Flame Signal: Warning
	Statement: In contact with water releases flammable gases (classification
	category depends on a prescribed test since the result would be different
	based on the substance's purity, form of particle and particle size)
STOT Repeated Exposure:	Category: 1 Symbol: Health hazard Signal: Danger Statement: Causes
	damage to organs through prolonged or repeated exposure Targets: lung
Hazards to the Aquatic	Category: 4 Symbol: None Signal: None Statement: May cause long lasting
Environment:	harmful effects to aquatic life
ZINC OXIDE (1314-13-2)	
Reproductive Toxicity:	Category: 2 Symbol: Health hazard Signal: Warning Statement: Suspected of
	damaging fertility or the unborn child
STOT Single Exposure:	Category: 1 Symbol: Health hazard Signal: Danger Statement: Causes
	damage to organs Targets: lung,systemic toxicity
Hazards to the Aquatic	Category: 1 Symbol: Environment Signal: Warning Statement: Very toxic to
Environment:	aquatic life
	Category: 1 Symbol: Environment Signal: Warning Statement: Very toxic to
	aquatic life with long lasting effects
SILICON (7440-21-3)	
Flammable Solids:	Category: 2 Symbol: Flame Signal: Warning Statement: Flammable solid
Serious Eye Damage/Eye Irritation:	Category: 2B Symbol: None Signal: Warning Statement: Causes eye irritation
GHS Classifications	
Classifications below published	by Korea's Ministry of Labor (MOL) or Office of National Emergency Management

### (NEMA, physical hazards only).

### ALUMINUM AS METAL (7429-90-5)

Carcinogenicity:	Hazard Category: Carc. 1A Symbol: Health hazard Signal Word: Danger Hazard Statement: H350 Precautionary Statement Prevention: P201,P202,P281 Precautionary Statement Response: P308+P313 Precautionary Statement Storage: P405 Precautionary Statement Disposal: P501			
ZINC OXIDE (1314-13-2	2)			
STOT Single Exposure:		Hazard Category: STOT Single 1 Symbol: Health hazard Signal Word: Danger Hazard Statement: H370 Target Organs: body,respiratory system Precautionary Statement Prevention: P260,P264,P270 Precautionary Statement Response: P307+P311,P321 Precautionary Statement Storage: P405 Precautionary Statement Disposal: P501		
STOT Repeated Exp	oosure:	Hazard Category: STOT Rep. 1 Symbol: Health hazard Signal Word: Danger Hazard Statement: H372 Target Organs: inhalation,lung Precautionary Statement Prevention: P260,P264,P270 Precautionary Statement Response: P314 Precautionary Statement Disposal: P501		
Hazards to the A Environ	-	Hazard Category: Aquatic Acute 1 Symbol: Environment Signal Word: Warning Hazard Statement: H400 Precautionary Statement Prevention: P273 Precautionary Statement Response: P391 Precautionary Statement Disposal: P501		

Korea

# Safety Data Sheet Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

Hazard Category: Aquatic Chronic 1 Symbol: Environment Signal Word: Warning Hazard Statement: H410 Precautionary Statement Prevention: P273 Precautionary Statement Response: P391 Precautionary Statement Disposal: P501

#### SILICON (7440-21-3)

Flammable Solids:

Hazard Category: Flam. Sol. 2 Symbol: Flame Signal Word: Warning Hazard Statement: H228 Precautionary Statement Prevention: P210,P240,P241,P280 Precautionary Statement Response: P370+P378

#### **New Zealand GHS Classifications**

Classifications below according to the Environmental Risk Management Authority's (ERMA) Hazardous Substances and New Organisms (HSNO) Act, as amended.

### Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

For a reference list defining the alphanumeric categories, please visit ChemADVISOR's website at www.chemadvisor.com\sdsoncommand\ghs\_NZ.html

#### ZINC OXIDE (1314-13-2)

Classifications: 9.1A algal,9.1A crustacean,9.1A fish,9.3C (Approval number: HSR003104); 9.1A algal,9.1A crustacean,9.1A fish,9.3C (>26% in a non hazardous diluent, Approval number: HSR006646)

#### MAGNESIUM OXIDE (1309-48-4)

Classifications: Present (>26% in a non hazardous diluent, Approval number: HSR006644) SILICON (7440-21-3)

Classifications: 4.1.1B,6.1E oral (Approval number: HSR001306)

#### South Africa GHS Classifications

Information below presented according to the South African Bureau of Standards (SANS 10234:2008 - Globally Harmonized System (GHS) of Classification and Labelling of Chemicals). The information below identifies substances with recommended GHS classifications by CAS or RR numbers and chemical names; the data field contains the word "Present" along with any clarifying information in parenthesis. NOTE: Due to copyright laws on the standard, we are not able to publish the classification. Details about South Africa's implementation of GHS are available by ordering the Standard and its supplement through the South African Bureau of Standards website.

#### ALUMINUM AS METAL (7429-90-5)

Listing: Present (coated, powder, stabilized)

#### **Taiwan GHS Classifications**

Information below presented according to Taiwan's Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs. The Taiwan National Standards, CNS 15030 Z1051 Chemical Classification and Labelling has established a series of standards provided guidance on Classification and labeling of chemicals according to GHS. The information below identifies substances with recommended GHS classifications by CAS or RR numbers and chemical names; the data field contains the word "Present" along with any clarifying information in parenthesis. NOTE: Due to copyright laws on the standard, we are not able to publish the classification.

#### ALUMINUM AS METAL (7429-90-5)

Listing: Substances and mixtures which, in contact with water, emit Flammable gases - Category 2 Flame Warning In contact with water releases flammable gases Do not add water to this product; Keep container dry

#### ZINC OXIDE (1314-13-2)

Listing: Hazardous to the aquatic environment (Chronic) - Category 1,Serious eye damage/eye irritation - Category 2B,Skin corrosion/irritation - Category 3,Specific target organ systemic toxicity (single exposure) - Category 3 Environment,Exclamation mark Warning Causes eye irritation;Causes mild skin irritation;May cause respiratory irritation;Very toxic to aquatic life with long lasting effects Avoid release to the environment;Remove/take off immediately all contaminated clothing;Wear suitable gloves

# \* \* \* Section 16 - OTHER INFORMATION\* \* \*

### Summary of Changes

Updated: 6/8/2012

### Material Name: ALUMINUM BILLETS EXTRUSIONS OR LOGS

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC -European Economic Community; EIN (EINECS) - European Inventory of Existing Commercial Chemical Substances; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NDSL - Non-Domestic Substances List; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; STOT - Specific Target Organ Toxicity; TDG -Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States; WHMIS - Workplace Hazardous Materials Information System

### Full text of R phrases in Section 3

R11 Highly flammable.

R15 Contact with water liberates extremely flammable gases.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### **Other Information**

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. **Disclaimer:** Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. THIS SDS IS TO BE UTILIZED SOLEY AS A REFERENCE DOCUMENT AND IT IS NOT TO BE USED TO SATISFY THE DISTRIBUTION REQUIREMENTS OF OSHA'S HAZARD COMMUNICATION STANDARD (HCS) NOR CANADA'S CONTROLLED PRODUCT REGULATION (CPR). Read the Safety Data Sheet before handling product.

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End of Sheet 00223720