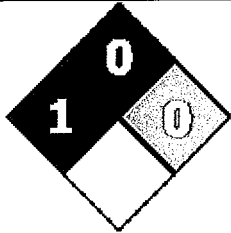



Aleris

Rolled Products

Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td></td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	1		0	Reactivity	0		Not Regulated
Health Hazard	1								
	0								
Reactivity	0								

Issuing Date 1-October-2008

Revision Date 1-October-2008

MSDS Number 002

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Aluminum coil and sheet for automotive and transportation applications

Product Code(s) 1XXX, 1100, 1200A, 1350, 3XXX, 3003, 3004, 3015, 3105, 3105S, GL33, GL99, BH22, GLXX, 5XXX, 5017, 5052, 5754, 8XXX, 8111, 6XXX, 6016

Recommended Use Automotive and transportation applications

Supplier Address
 Aleris Rolled Products
 1372 State Road 1957
 Lewisport, KY 42351-0480
 270-295-3451

Emergency Telephone Number Chemtrec 800-424-9300

2. HAZARDS IDENTIFICATION

CAUTION!

Appearance Silver, Metallic, Color, Solid **Physical State** Solid **Odor** None

Potential Health Effects

Acute Toxicity

Eyes	May cause slight irritation.
Skin	Does not pose a potential of skin irritation and sensitization.
Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system.
Ingestion	Not an expected route of exposure. Ingestion may cause irritation to mucous membranes. May be harmful if swallowed.

Chronic Effects

No known chronic effects of components present at greater than 1%.

Aggravated Medical Conditions

Skin disorders. Respiratory disorders. Asthma.

Environmental Hazard See Section 12 for additional Ecological Information.

Chemical Name	CAS-No	Weight %
Aluminum	7429-90-5	>92
Zinc	7440-66-6	<5.85
Magnesium	7439-95-4	<5.50
Silicon	7440-21-3	<2.0
Manganese	7439-96-5	<1.50
Chromium	7440-47-3	<0.35
Nickel	7440-02-0	<0.05
Lead	7439-92-1	<0.01

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

Inhalation Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Not an expected route of exposure. Immediate medical attention is not required. Consult a physician if necessary.

Notes to Physician Treat symptomatically.

Flammable Properties Finely divided aluminum powder or dust may form explosive mixtures in air.

Flash Point Not applicable.

Suitable Extinguishing Media Do not use water or foam. Dry chemical recommended.

Unsuitable Extinguishing Media DO NOT USE WATER OR FOAM.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Specific Hazards Arising from the Chemical Molten aluminum in the presence of water is very unstable. Do not use water to extinguish where there is a possibility of molten aluminum being present. Finely divided aluminum will form explosive mixture in air.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health Hazard 1	Flammability 0	Stability 0	Physical and Chemical Hazards -
HMS	Health Hazard 1	Flammability 0	Stability 0	Personal Precautions -

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up No special precautions for large product fragments. For dust cleanup use protective equipment. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid dust formation. Do not breathe vapors/dust. Do not touch cast aluminum metal or heated aluminum product without knowing metal temperature. Aluminum experiences no color change during heating. Contact with hot metal can cause skin and eye burns.

Storage Keep in a dry, cool and well-ventilated place.

Exposure Guidelines The following table lists exposure limits for all chemicals listed in Section 3 where a limit exists.

Chemical Name	ACGIH TLV	OSHA PEL
Aluminum 7429-90-5	TWA: 10 mg/m ³	TWA: 15 mg/m ³ (total) TWA: 5 mg/m ³ (respirable)
Silicon 7440-21-3	TWA: 10 mg/m ³ TWA: 15 mg/m ³ (total)	TWA: 5 mg/m ³ (respirable)
Manganese 7439-96-5	TWA: 0.2 mg/m ³	Ceiling: 5 mg/m ³
Copper 7440-50-8	TWA: 0.2 mg/m ³ (fume) TWA: 1 mg/m ³ (dust)	TWA: 0.1 mg/m ³ (dust)
Chromium 7440-47-3	TWA: 0.5 mg/m ³	TWA: 1 mg/m ³
Zirconium 7440-67-7	TWA: 10 mg/m ³ STEL TWA: 5 mg/m ³	TWA: 5 mg/m ³
Tin 7440-31-5	TWA: 2 mg/m ³	TWA: 2 mg/m ³
Nickel 7440-02-0	TWA: 1.5 mg/m ³	TWA: 1 mg/m ³
Lead 7439-92-1	TWA: 0.05 mg/m ³	TWA: 50 µg/m ³

Other Exposure Guidelines Hexavalent chrome may be formed during welding. The welding of aluminum alloys may generate carbon monoxide, carbon dioxide, ozone, nitrogen oxides, infrared radiation and ultra-violet radiation.

Engineering Measures Showers
 Eyewash stations
 Ventilation systems

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Avoid contact with eyes.

Skin and Body Protection Impervious gloves.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Appearance	Silver Metallic Color Solid	Odor	None
Odor Threshold	No information available	Physical State	Solid
pH	No information available	Autoignition Temperature	No information available
Flash Point	Not applicable	Boiling Point/Range	No information available
Decomposition Temperature	No information available	Explosion Limits	No information available
Melting Point/Range	915-1215°F	Evaporation Rate	No information available
Flammability Limits in Air	No information available	Vapor Density	No data available
Solubility	No information available	VOC Content	Not applicable
Vapor Pressure	No data available		
Density	0.095-0.103 lbs/in ³		

Stability Stable under recommended storage conditions.

Incompatible Products Acids. Alkalis. Hydroxides. Halogens.

Conditions to Avoid Aluminum fines are attacked by strong acids and alkalis and by some halogenated organic compounds especially at elevated temperatures. Operations generating aluminum fines may produce hydrogen gas when exposed to moisture. Hydrogen gas is highly flammable and can accumulate in poorly ventilated areas.

Hazardous Decomposition Products Welding of aluminum alloys may generate carbon monoxide, carbon dioxide, ozone, and nitrogen oxides.

Hazardous Polymerization Hazardous polymerization does not occur.

Acute Toxicity

Product Information The product itself has not been tested.

Chronic Toxicity

Chronic Toxicity No known chronic effects of components present at greater than 1%.

Carcinogenicity No known carcinogens are present at greater than 0.1%.

Sensitization None known.

Mutagenic Effects None known.

Reproductive Toxicity None known.

Developmental Toxicity None known.

Target Organ Effects No known effects under normal use conditions.

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

Contaminated Packaging

Dispose of in accordance with local regulations.

DOT

U.S. Department of Transportation Not regulated

TDG

Transport Dangerous Goods (Canada) Not regulated

MEX

Transport Dangerous Goods (Mexico) Not regulated

ICAO

International Civil Aviation Organization Not regulated

IATA

International Air Transport Association Not regulated

IMDG/IMO

International Maritime Dangerous Goods Code/International Maritime Organization Not regulated

RID

International Transport of Dangerous Goods by Rail Not regulated

ADR

International Transport of Dangerous Goods by Rail Not regulated

ADN

International Transport of Dangerous Goods by Inland Waterway Not regulated

CONEG:

This material meets CONEG requirements for packaging materials in that the sum of the concentration levels of incidentally introduced lead, mercury, cadmium, and hexavalent chromium present do not exceed 100 ppm.

FDA:

This grade of aluminum is considered generally recognized as safe (GRAS) for use in food packaging materials.

U.S. Federal Environmental Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Aluminum	7429-90-5	60-100	1.0
Zinc	7440-66-6	5-10	1.0
Manganese	7439-96-5	1-5	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard No
 Chronic Health Hazard No
 Fire Hazard No
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

U.S. State Regulations

California Proposition 65

This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

Chemical Name	CAS-No	California Prop. 65
Nickel	7440-02-0	Carcinogen
Lead	7439-92-1	Carcinogen Developmental Female Reproductive Male Reproductive

CONEG: This material meets CONEG requirements for packaging materials in that the sum of the concentration levels of incidentally introduced lead, mercury, cadmium, and hexavalent chromium present do not exceed 100 ppm.

International Regulations

Mexico

Chemical Name	Carcinogen Status	Exposure Limits
Aluminum		Mexico: TWA= 10 mg/m3
Manganese		Mexico: TWA= 0.2 mg/m3 Mexico: TWA= 1 mg/m3 Mexico: STEL= 3 mg/m3
Chromium		Mexico: TWA= 0.5 mg/m3
Silicon		Mexico: TWA= 10 mg/m3 Mexico: STEL= 20 mg/m3
Nickel		Mexico: TWA= 1 mg/m3
Lead	A3	Mexico: TWA= 0.15 mg/m3

Canada

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 CPR.

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION

Issuing Date October 1, 2008
Revision Date October 1, 2008
Revision Note Not applicable.

Disclaimer

Information herein is given in good faith as authoritative and valid: however, no warranty, express or implied, can be made.

The condition or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this reason, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

Commercial Sales Note: Check with your Aleris Rolled Products Sales Associate for specific Alloy availability.

End of Safety Data Sheet