Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 06/26/2015 Reviewed on 06/26/2015

* 1 Identification

· **Product identifier**

· **Trade name: Aluminum Coil and Sheet**
· **Product number:** 5XXX Type Alloys
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Product description** Bare or coated coil /sheet
· **Application of the substance / the mixture** Fabrication into various aluminum products and parts

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Vulcan, Inc.
410 East Berry Avenue
Foley, AL 36535
251-943-7000
www.vulcaninc.com
· **Emergency telephone number:**
1-800-535-5053 INFOTRAC, Inc.
1-251-943-4500 VULCAN ALUMINUM

* 2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
STOT SE 3	H335	May cause respiratory irritation.

· **Label elements**
· **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS07

· **Signal word** Warning
· **Hazard statements**
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
· **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

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Trade name: Aluminum Coil and Sheet

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

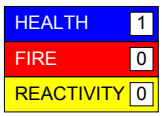
· ***Unknown acute toxicity:***
6.6 percent of the mixture consists of ingredient(s) of unknown toxicity.

· ***Classification system:***

· ***NFPA ratings (scale 0 - 4)***

Health = 1
Fire = 0
Reactivity = 0

· ***HMIS-ratings (scale 0 - 4)***



Health = 1
Fire = 0
Reactivity = 0

· ***Hazard(s) not otherwise classified (HNOC):*** None known

* 3 Composition/information on ingredients

· ***Chemical characterization: Mixtures***

· ***Description:*** Mixture of substances listed below with nonhazardous additions.

· ***Dangerous Components:***		
CAS: 7429-90-5 RTECS: BD 0330000	Aluminium Flam. Sol. 2, H228	>84.9%
CAS: 7439-96-5 RTECS: OO 9275000	Manganese Pyr. Sol. 1, H250; Water-react. 1, H260	<1.5%
CAS: 7440-21-3	Silicon Flam. Sol. 2, H228; Acute Tox. 4, H302; Eye Irrit. 2B, H320	<1.1%
CAS: 7440-66-6	Zinc Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Eye Irrit. 2B, H320; Combustible Dust	<0.4%
CAS: 7439-95-4 RTECS: OM 2100000	Magnesium Pyr. Sol. 1, H250; Water-react. 1, H260	<6.6%
CAS: 7440-47-3 RTECS: GB 4200000	Chromium Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	<0.6%
CAS: 7440-50-8 RTECS: GL 5325000	Copper STOT SE 3, H335; Aquatic Chronic 4, H413	<0.1%
CAS: 7440-02-0	Nickel Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317	0-0.05%

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· ***Additional information:***
Our coil and sheet products may contain coatings comprising less than 0.5% by weight of glycols, esters, fatty acids, antioxidants, and residual light and heavy hydrocarbons.

* 4 First-aid measures

· ***Description of first aid measures***
· ***After inhalation:***
Remove person to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.
· ***After skin contact:***
Wash skin with soap and water for at least 15 minutes. If irritation develops, SEEK MEDICAL ATTENTION.
· ***After eye contact:***
Immediately flush eyes with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention if adverse effect occurs.
· ***After swallowing:***
If the material is swallowed, get immediate medical attention or advice. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting.
· ***Information for doctor:***
· ***Most important symptoms and effects, both acute and delayed:*** No further relevant information available.
· ***Indication of any immediate medical attention and special treatment needed***
No further relevant information available.

* 5 Fire-fighting measures

· ***Extinguishing media***
· ***Suitable extinguishing agents:***
Use Class D extinguishing agents on dusts, fines or molten metal. Use coarse water spray on chips and turnings.
· ***Special hazards arising from the substance or mixture***
This product does not present fire or explosion hazards as shipped. Small chips, turnings, dust and fines from processing may be readily ignitable.
· ***Advice for firefighters***
· ***Protective equipment:***
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
· ***Additional information***
Fire/Explosion:
May be a potential hazard under the following conditions:
Dust or fines dispersed in the air can be explosive. Even a minor dust cloud can explode violently.
Chips, dust or fines in contact with water can generate flammable/explosive hydrogen gas. Hydrogen gas could present an explosion hazard in confined or poorly ventilated spaces.
Fines and dust in contact with certain metal oxides (e.g., rust). A thermite reaction, with considerable heat generation, can be initiated by a weak ignition source.
Molten metal in contact with water/moisture or other metal oxides (e.g., rust). Moisture entrapped by molten metal can be explosive. Contact of molten aluminum with other metal oxides can initiate a thermite reaction.

6 Accidental release measures

· ***Personal precautions, protective equipment and emergency procedures*** Not required.
· ***Environmental precautions:***
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

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· ***Methods and material for containment and cleaning up:***
Dispose of the collected material according to regulations.
· ***Reference to other sections***
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and storage

· ***Handling:***
· ***Precautions for safe handling***
If molten: Contain the flow using dry sand or salt flux as a dam. Do not use shovels or hand tools to halt the flow of molten aluminum. Allow the spill to cool before re-melting as scrap. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.
· ***Information about protection against explosions and fires:*** No special measures required.

· ***Conditions for safe storage, including any incompatibilities***
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:***
Product should be kept dry. Avoid generating dust. Avoid contact with sharp edges or heated metal. Hot and cold aluminum are not visually different.
· ***Information about storage in one common storage facility:*** Not required.
· ***Further information about storage conditions:*** None.
· ***Specific end use(s)***
Requirements for Processes Which Generate Dusts or Fumes:

If processing of these products includes operations where dust or extremely fine particulate is generated, obtain and follow the safety procedures and equipment guides contained in Aluminum Association Bulletin F-1 and National Fire Protection Association (NFPA) brochures listed in Section 16. Cover and reseal partially empty containers. Use non-sparking handling equipment. Provide grounding and bonding where necessary to prevent accumulation of static charges during dust handling and transfer operations (See Section 15). Local ventilation and vacuum systems must be designed to handle explosive dusts. Dry vacuums and electrostatic precipitators must not be used. Dust collection systems must be dedicated to aluminum dust only and should be clearly labeled as such. Do not co-mingle fines of aluminum with fines of iron, iron oxide (rust) or other metal oxides. Do not allow chips, fines or dust to contact water, particularly in enclosed areas. Avoid all ignition sources. Good housekeeping practices must be maintained.

Requirements for Re-melting of Scrap Material and/or Ingot:

Molten metal and water can be an explosive combination. The risk is greatest when there is sufficient molten metal to entrap or seal off the water. Water and other forms of contamination on or contained in scrap or re-melt ingot are known to have caused explosions in melting operations. While the products may have minimal surface roughness and internal voids, there remains the possibility of moisture contamination or entrapment. If confined, even a few drops of water can lead to violent explosions. All tooling and containers which come in contact with molten metal must be preheated or specially coated and rust free. Molds and ladles must be preheated or oiled prior to casting. Any surfaces that may contact molten metal (e.g., concrete) should be specially coated. Drops of molten metal in water (e.g. from plasma arc cutting), while not normally an explosion hazard, can generate enough flammable hydrogen gas to present an explosion hazard. Vigorous circulation of the water and removal of the particles minimize the hazards.

During melting operations, the following minimum guidelines should be observed:

• Inspect all materials prior to furnace charging and completely remove surface contamination such as water, ice, snow, deposits of grease and oil or other surface contamination resulting from weather exposure, shipment, or storage.

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• Store materials in dry, heated areas with any cracks or cavities pointed downwards.
• Preheat and dry large or heavy items such as ingot adequately before charging into a furnace containing molten metal. This is typically done by use of a drying oven or homogenizing furnace. The drying cycle should bring the internal metal temperature of the coldest item of the batch to 400°F and then hold at that temperature for 6 hours.

* 8 Exposure controls/personal protection

· ***Additional information about design of technical systems:*** No further data; see section 7.

· ***Control parameters***

· ***Components with occupational exposure limits:***	
7429-90-5 Aluminium	
PEL	Long-term value: 15*; 15** mg/m³ *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV	Long-term value: 1* mg/m³ as Al; *as respirable fraction
7439-96-5 Manganese	
PEL	Ceiling limit value: 5 mg/m³ as Mn
REL	Short-term value: 3 mg/m³ Long-term value: 1 mg/m³ fume, as Mn
TLV	Long-term value: 0.02* 0.1* mg/m³ as Mn; *respirable **inhalable fraction
7440-21-3 Silicon	
PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction
TLV	TLV withdrawn

· ***Additional Occupational Exposure Limit Values for possible hazards during processing:***
Alumina (non-fibrous) (1344-28-1)
ACGIH as Al: 10 mg/m3 TWA (The value is for total dust containing no asbestos and < 1% crystalline silica)
OSHA 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Magnesium oxide fume (1309-48-4)
ACGIH 10 mg/m3 TWA
OSHA total particulate: 15 mg/m3 TWA
Zinc oxide (1314-13-2)
ACGIH fume: 5 mg/m3 TWA; dust: 10 mg/m3 TWA (The value for Zinc oxide 'dust' is for total dust containing no asbestos and < 1% crystalline silica)
ACGIH fume: 10 mg/m3 STEL
OSHA 5 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Manganese inorganic compounds (Not Available)
ACGIH as Mn; 0.2 mg/m3 TWA
OSHA C 5 mg/m3 (as Mn)
Silica fume (amorphous) (69012-64-2)
ACGIH 2 mg/m3 TWA (This value is for the respirable fraction of the silica fume)

(Contd. on page 6)

Nickel insoluble compounds (Not Available)
ACGIH as Ni, inhalable fraction: 0.2 mg/m3 TWA
OSHA 1 mg/m3 TWA (as Ni)
Chromium (II) compounds (Not Available)
OSHA 0.5 mg/m3 TWA (as Cr)
Chromium (III) compounds (as Cr) (Not Available)
ACGIH as Cr: 0.5 mg/m3 TWA
Chromium (VI) compounds- water soluble (Not Available)
ACGIH 0.05 mg/m3 TWA
Chromium (VI) compounds (certain water insoluble forms) (Not Available)
ACGIH 0.01 mg/m3 TWA
Chromic acid and chromates (7738-94-5)
OSHA and chromates: C 1 mg/10m3
Oil mist, mineral (8012-95-1)
ACGIH 5 mg/m3 TWA (as sampled by a method that does not collect vapor)
ACGIH (10) mg/m3 STEL (as sampled by a method that does not collect vapor)
OSHA 5 mg/m3 TWA
Welding fumes (NOC) (Not Available)
ACGIH 5 mg/m3 TWA
Ozone (10028-15-6)
ACGIH Heavy work: 0.05 ppm TWA; Moderate work: 0.08 ppm TWA; Light work: 0.1 ppm TWA; heavy, moderate or light work, ≤ 2Hrs: 0.20 ppm
OSHA 0.1 ppm TWA; 0.2 mg/m3 TWA
Nitrogen dioxide (10102-44-0)
ACGIH 3 ppm TWA
ACGIH 5 ppm STEL
OSHA C 5 ppm; C 9 mg/m3
Nitric oxide (10102-43-9)
ACGIH 25 ppm TWA
OSHA 25 ppm TWA; 30 mg/m3 TWA

· ***Additional information:*** The lists that were valid during the creation of this SDS were used as basis.

· ***Exposure controls***
Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Where acceptable concentrations cannot be maintained by general mechanical ventilation, local exhaust ventilation is recommended.

· ***Personal protective equipment:***

· ***General protective and hygienic measures:***
Wash hands before breaks and at the end of work.
Immediately remove all soiled and contaminated clothing and wash before reuse.

· ***Breathing equipment:***
If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces.

· ***Protection of hands:***
Wear impervious gloves to avoid repeated or prolonged skin contact with residual oils and to avoid any skin injury.

· ***Penetration time of glove material***
The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· ***Eye protection:*** Wear safety glasses/goggles to avoid eye contact.

· ***Body protection:***
Personnel who handle and work with molten metal should utilize primary protective clothing like face shields, fire resistant tapper's jackets, leggings, spats and similar equipment to prevent burn injuries. In addition to

(Contd. on page 7)

primary protection, secondary or day-to-day work clothing that is fire resistant and sheds metal splash is recommended for use with molten metal.

* 9 Physical and chemical properties

· ***Information on basic physical and chemical properties***
· ***General Information***
· ***Appearance:***

Form:	Sheet, plate, wire, rod, bar, extrusion, forgings, etc.
Color:	Grey
· ***Odor:***	Odorless
· ***Odor threshold:***	Not determined.
· ***pH-value:***	Not applicable.
· ***Change in condition***	
Melting point/Melting range:	566-660 °C (1051-1220 °F)
Boiling point/Boiling range:	Not determined.
· ***Flash point:***	Not applicable.
· ***Flammability (solid, gaseous):***	Not determined.
· ***Ignition temperature:***	
Decomposition temperature:	Not determined.
· ***Auto igniting:***	Product is not self-igniting.
· ***Danger of explosion:***	Product does not present an explosion hazard.
· ***Explosion limits:***	
Lower:	Not determined.
Upper:	Not determined.
· ***Vapor pressure:***	Not applicable.
· ***Density @ 20 °C (68 °F):***	2.64-2.72 g/cm³ (22.031-22.698 lbs/gal)
· ***Relative density***	Not determined.
· ***Vapor density***	Not applicable.
· ***Evaporation rate***	Not applicable.
· ***Solubility in / Miscibility with***	
Water:	Insoluble.
· ***Partition coefficient (n-octanol/water):***	Not determined.
· ***Viscosity:***	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· ***Other information***	No further relevant information available.

* 10 Stability and reactivity

· ***Reactivity*** No further relevant information available.
· ***Chemical stability*** Stable under normal conditions.
· ***Thermal decomposition / conditions to be avoided:*** No decomposition if used according to specifications.
· ***Possibility of hazardous reactions*** No known hazardous reactions
· ***Conditions to avoid***
Chips, fines, dust and molten metal are considerably more reactive with the following:
• Water: Slowly generates flammable/explosive hydrogen gas and heat. Generation rate is greatly increased

(Contd. on page 8)

with smaller particles (e.g., fines and dusts). Molten metal can react violently/explosively with water or moisture, particularly when the water is entrapped.
• Heat: Oxidizes at a rate dependent upon temperature and particle size.
• Strong oxidizers: Violent reaction with considerable heat generation. Can react explosively with nitrates (e.g., ammonium nitrate and fertilizers containing nitrate) particularly when heated or molten.
• Acids and alkalis: Reacts to generate flammable/explosive hydrogen gas. Generation rate is greatly increased with smaller particles (e.g., fines and dusts).
• Halogenated compounds: Many halogenated hydrocarbons, including halogenated fire extinguishing agents, can react violently with finely divided aluminum.
• Iron oxide (rust) and other metal oxides (e.g., copper and lead oxides): A violent thermite reaction generating considerable heat can occur. Reaction with aluminum fines and dusts requires only very weak ignition sources for initiation. Molten aluminum can react violently with iron oxide without external ignition source.

· ***Incompatible materials:*** No further relevant information available.

· ***Hazardous decomposition products:*** No dangerous decomposition products known.

11 Toxicological information

· ***Information on toxicological effects***

· ***Acute toxicity:***

· ***LD/LC50 values that are relevant for classification:***

7429-90-5 Aluminium		
Oral	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	888 mg/l (rat)
7439-96-5 Manganese		
Oral	LD50	9000 mg/kg (rat)
7440-21-3 Silicon		
Oral	LD50	3160 mg/kg (rat)

· ***Primary irritant effect:***

· ***on the skin:*** No irritating effect.

· ***on the eye:*** No irritating effect.

· ***Additional toxicological information:***

· ***Carcinogenic categories***

· ***IARC (International Agency for Research on Cancer)***		
7440-47-3	Chromium	3
7440-02-0	Nickel	1

· ***NTP (National Toxicology Program)***		
7440-02-0	Nickel	R

· ***OSHA-Ca (Occupational Safety & Health Administration)***
None of the ingredients are listed.

* 12 Ecological information

· ***Toxicity***

· ***Aquatic toxicity:***

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

7439-96-5 Manganese	
EC50	40 mg/l (Water flea)

(Contd. on page 9)

7440-66-6 Zinc	
72 Hr EC50	5 ug/mL (Water flea)
96 Hr EC50	30 ug/mL (daphnia)
96 Hr LC50	6.4 mg/L (Pimephales)
7440-50-8 Copper	
96 Hr LC50	23 ug/mL (Pimephales)
EC50	0.04-0.05 mg/l (Water flea)

· ***Persistence and degradability*** No further relevant information available.
· ***Behavior in environmental systems:***
· ***Bioaccumulative potential*** No further relevant information available.
· ***Mobility in soil*** No further relevant information available.
· ***Ecotoxical effects:***
· ***Remark:*** Harmful to fish
· ***Additional ecological information:***
· ***General notes:*** Harmful to aquatic organisms
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.
· ***Other adverse effects*** No further relevant information available.

* 13 Disposal considerations

· ***Waste treatment methods***
· ***Recommendation:***
Observe all federal, state and local environmental regulations when disposing of this material.

· ***Uncleaned packagings:***
· ***Recommendation:*** Disposal must be made according to official regulations.
· ***Recommended cleansing agent:*** Water, if necessary with cleansing agents.

14 Transport information

· ***UN-Number***
· ***DOT, ADR, ADN, IMDG, IATA*** Non-Regulated Material
· ***UN proper shipping name***
· ***DOT, ADR, ADN, IMDG, IATA*** Non-Regulated Material
· ***Transport hazard class(es)***

· ***DOT, ADR, ADN, IMDG, IATA***
· ***Class*** Non-Regulated Material
· ***Packing group***
· ***DOT, ADR, IMDG, IATA*** Non-Regulated Material
· ***Environmental hazards:*** Not applicable.
· ***Special precautions for user*** Not applicable.
· ***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code*** Not applicable.
· ***UN "Model Regulation":*** -

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Issue date 06/26/2015 Reviewed on 06/26/2015

Trade name: Aluminum Coil and Sheet

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

7429-90-5	Aluminium
7439-96-5	Manganese
7440-47-3	Chromium
7440-66-6	Zinc
7440-50-8	Copper
7440-02-0	Nickel

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**

7440-02-0	Nickel

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7439-96-5	Manganese	D
7440-47-3	Chromium	D
7440-66-6	Zinc	D, I, II
7440-50-8	Copper	D

· **TLV (Threshold Limit Value established by ACGIH)**

7429-90-5	Aluminium	A4
7440-47-3	Chromium	A4
7440-02-0	Nickel	A5

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

7440-02-0	Nickel

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: Aluminum Coil and Sheet

· ***Hazard pictograms***

GHS07

· ***Signal word*** Warning

· ***Hazard statements***

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.

· ***Precautionary statements***

Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.
Wear eye protection / face protection.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· ***National regulations:***

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· ***State Right to Know***

CAS: 7429-90-5 RTECS: BD 0330000	Aluminium Flam. Sol. 2, H228	>84.9%
CAS: 7439-95-4 RTECS: OM 2100000	Magnesium Pyr. Sol. 1, H250; Water-react. 1, H260	<6.6%
CAS: 7439-96-5 RTECS: OO 9275000	Manganese Pyr. Sol. 1, H250; Water-react. 1, H260	<1.5%
CAS: 7440-21-3	Silicon Flam. Sol. 2, H228; Acute Tox. 4, H302; Eye Irrit. 2B, H320	<1.1%
CAS: 7440-47-3 RTECS: GB 4200000	Chromium Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2B, H320	<0.6%
CAS: 7440-66-6	Zinc Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Eye Irrit. 2B, H320; Combustible Dust	<.4%

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Trade name: Aluminum Coil and Sheet

CAS: 7440-02-0	Nickel Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317	0-0.05%
CAS: 7440-50-8 RTECS: GL 5325000	Copper STOT SE 3, H335; Aquatic Chronic 4, H413	<0.1%
All ingredients are listed.		

· ***Chemical safety assessment:*** A Chemical Safety Assessment has not been carried out.

* 16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· ***Date of preparation / last revision*** 06/26/2015 / 4

· ***Abbreviations and acronyms:***

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 2: Flammable solids, Hazard Category 2
Pyr. Sol. 1: Pyorphoric Solids, Hazard Category 1
Water-react. 1: Substances and Mixtures which, in contact with water, emit flammable gases, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

· ***Sources***

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• Aluminum Association, "Guidelines for Handling Molten Aluminum, The Aluminum Association, 900 19th Street, N.W., Washington, DC 20006.
• NFPA 65, Standard for Processing and Finishing of Aluminum (NFPA phone: 800-344-3555)
• NFPA 651, Standard for Manufacture of Aluminum and Magnesium Powder
• NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
• NFPA 77, Standard for Static Electricity
• Guide to Occupational Exposure Values-1999, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
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(Contd. on page 13)

Safety Data Sheet (SDS)

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· **** Data compared to the previous version altered.***

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