



## R-CLD constrained layer damping

### 1. Identification of the substance/mixture and of the company

#### 1.1 Product identifier

SIDERISE R-CNC aluminium with adhesive backing.

#### 1.2 Relevant identified uses of the substance

Aluminium with adhesive backing for the acoustic insulation of rail carriages.

#### 1.3 Details of the supplier of the safety data sheet

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#### 1.4 Emergency telephone number

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## Data for aluminium

(Please also refer to data for adhesive.)

### 2. Hazards identification

#### 2.1 Potential acute health effects

Slightly hazardous in case of skin contact (irritant). Non-irritating to the eyes. Non-hazardous in case of ingestion.

#### 2.2 Potential chronic health effects

Carcinogenic effects: Not available; Mutagenic effects: Not available; Teratogenic effects: Not available; Developmental toxicity: Not available.

The substance is toxic to lungs. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

### 3. Composition/Information on ingredients

#### 3.1 Identification of substance or preparation

Aluminium.

### 4. First aid measures

#### 4.1 Description of first aid measures

Remove contaminated clothing.

##### 4.1.1 Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. Serious inhalation: Not available.

##### 4.1.2 Skin

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Serious skin contact: Not available.

##### 4.1.3 Eye

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

##### 4.1.4 Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. Serious ingestion: Not available

### 5. Fire fighting measures

#### 5.1 Extinguishing media

##### 5.1.1 Suitable extinguishing media

Small fire: Use dry chemical powder.

Large fire: Use water spray, fog or foam. Do not use water jet.

##### 5.2 Special hazards arising from the substance or mixture

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

##### 5.3 Special remarks on fire hazards

Not available.

5.4 Special remarks on explosion hazards  
Not available.

## 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

### 6.1.1 Small spill

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

### 6.1.2 Large spill

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## 7. Handling and storage

### 7.1 Precautions for safe handling

Do not ingest. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep container in a cool, well-ventilated area. Moisture sensitive.

## 8. Exposure controls / personal protection

### 8.1 Control parameters

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### 8.2 Exposure controls

#### 8.2.1 Individual protection measures, such as personal protective equipment

##### ■ Eye protection

Required when there is a risk of eye contact. Safety glasses.

##### ■ Hand protection

Protective gloves.

##### ■ Body protection

Body protection must be chosen depending on activity and possible exposure, e.g. lab coat.

### 8.3 Exposure limits

Consult local authorities for acceptable exposure limits.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance: Solid.

b) Colour: Silver-white.

c) Odour: Odourless.

d) Odour threshold: Not determined.

e) Molecular weight: 26.98 g/mole

f) pH value: Not applicable.

g) Melting point: 660°C (1220°F).

h) Boiling range: 2327°C (4220.6°F).

i) Critical temperature: Not available.

j) Flash point: Not available.

k) Evaporation rate: Not applicable. The product is a non-volatile solid.

l) Flammability: Non-flammable.

m) Flammable limits: Not available.

n) Ignition temperature: Not available

o) Vapour pressure: Not applicable.

p) Vapour density: Not available.

q) Solubility in water: Insoluble in cold water, hot water. Soluble in alkalies, Sulfuric acid, Hydrochloric acid. Insoluble in concentrated Nitric Acid, hot Acetic acid.

- r) Explosion hazard: Not available.
- s) Fire hazards in presence of various substances: Not available.
- t) Products of combustion: Some metallic oxides.
- u) Specific gravity: Density: 2.6 (Water = 1).
- v) Water/Oil Dist. Coeff.: Not available.
- w) Ionicity (in water): Not available.
- x) Dispersion properties: Not available.

## 10. Stability and reactivity

### 10.1 Reactivity

The product is stable.

### 10.2 Instability temperature

Not available.

### 10.3 Conditions of instability

Incompatible materials, exposure to moist air or water.

### 10.4 Incompatible materials

Reactive with oxidizing agents, acids, alkalis.

### 10.5 Corrosivity

Not available.

### 10.6 Special remarks on reactivity

Moisture sensitive. Aluminum reacts vigorously with Sodium Hydroxide. Aluminum is also incompatible with strong oxidizers, acids, chromic anhydride, iodine, carbon disulfide, methyl chloride, and halogenated hydrocarbons, acid chlorides, ammonium nitrate, ammonium persulfate, antimony, arsenic oxides, barium bromate, barium chlorate, barium iodate, metal salts.

### 10.7 Special Remarks on Corrosivity

In moist air, oxide film forms which protects metal from corrosion. Aluminum is strongly electropositive so that it corrodes rapidly in contact with other metals.

### 10.8 Polymerization

Will not occur.

## 11. Toxicological information

### 11.1 Information on toxicological effects

#### 11.1.1 Routes of entry

Not available.

#### 11.1.2 Chronic effects on humans

Not available.

#### 11.1.3 Other toxic effects on humans

Slightly hazardous in case of skin contact (irritant). Non-hazardous in case of ingestion. Non-hazardous in case of inhalation.

#### 11.1.4 Special remarks on chronic effects on humans

Not available.

### 11.2 Acute toxicity

Skin: Exposure to aluminum may cause skin irritation.

Eyes: Not expected to be a hazard unless aluminum dust particles are present. Exposure to aluminum dust may cause eye irritation by mechanical action. Aluminum particles deposited in the eye are generally innocuous.

Inhalation: Not expected to be an inhalation hazard unless it is heated or if aluminum dust is present. If heated or in dust form, it may cause respiratory tract irritation. Heating Aluminum can release Aluminum Oxide fumes and cause fume metal fever when inhaled. This is a flu-like illness with symptoms of metallic taste, fever, chills, aches, chest tightness, and cough.

Ingestion: Acute aluminum toxicity is unlikely.

#### 11.2.1 Chronic potential health effects

Skin: Contact dermatitis occurs rarely after aluminum exposure.

Most cases of aluminum toxicity in humans are in one of two categories: patients with chronic renal failure, or people exposed to aluminum fumes or dust in the workplace. The main source of aluminum in people with chronic renal failure was in the high aluminum content of the water for the dialysate used for dialysis in the 1970's. Even though this problem was recognized and corrected, aluminum toxicity continues to occur in some individuals with renal who chronically ingest aluminum-containing phosphate binders or antacids.

Inhalation: Chronic exposure to aluminum dust may cause dyspnea, cough, asthma, chronic obstructive lung disease, pulmonary fibrosis, pneumothorax, pneumoconiosis, encephalopathy, weakness, incoordination and epileptiform seizures and other neurological symptoms similar to that described for chronic ingestion. Hepatic necrosis is also a reported effect of exposure to airborne particulates carrying aluminum.

Ingestion: Chronic ingestion of aluminum may cause Aluminum Related Bone Disease or aluminum-induced Osteomalacia with fracturing Osteodystrophy, microcytic anemia, weakness, fatigue, visual and auditory hallucinations, memory loss, speech and language impairment (dysarthria, stuttering, stammering, anomia, hypofluency, aphasia and eventually, mutism), epileptic seizures (focal or grand mal), motor disturbance (tremors, myoclonic jerks, ataxia, convulsions, asterixis, motor apraxia, muscle fatigue), and dementia (personality changes, altered mood, depression, diminished alertness, lethargy, 'clouding of the sensorium', intellectual deterioration, obtundation, coma), and altered EEG.

## 12. Ecological information

### 12.1 Toxicity

Not available.

### 12.2 BOD and COD

Not available.

### 12.3 Products of biodegradation

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

### 12.4 Toxicity of products of biodegradation

The products of degradation are less toxic than the product itself.

### 12.5 Special remarks on the products of biodegradation

Not available.

## 13. Disposal considerations

### 13.1 Waste treatment methods

Check for possible recycling. Observe national and local legal requirements.

### 13.2 Packaging

Contaminated packaging: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product. Completely emptied packaging can be given for recycling.

## 14. Transportation

### 14.1 Special provisions for transport

Not applicable.

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this Safety Data Sheet, then it is described in this subsection.

### 15.2 Important notice

The information included in the Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

No liability will be accepted (except as by specified by law) for use of information taken from this safety data sheet. It is the responsibility of the user of this product to observe the rules and regulations.

## 16. Other information

### 16.1 Additional information

This Safety Data Sheet refers specifically to the products listed and can not be used for other products.

## Data for adhesive

(Please also refer to data for aluminium.)

### 1. Identification of the substance/mixture and of the company

See page 1.

### 2. Hazards identification

#### 2.1 Main hazards

This product is not considered to be dangerous to man and the environment. There is no evidence to suggest that this material constitutes adverse physicochemical, human health and environmental effects and symptoms during use and handling under normal safe working conditions.

### 3. Composition/Information on ingredients

#### 3.1 Identification of substance or preparation

Single lined transfer tape.

Adhesive is solvent based acrylic adhesive consisting of a combination of resin, copolymer, stabilisator and crosslinker. Liner is siliconised paper.

#### 3.2 Representative hazardous substances for health or environment

This product does not contain substances in concentrations above the threshold limits mentioned in Annex 2, § 3 of Regulation (EC) 1907/2006.

#### 3.3 Identification number(s)

Not applicable.

### 4. First aid measures

#### 4.1 Inhalation

Remove from exposure and obtain medical assistance in case of breathing difficulties.

#### 4.1.2 Skin

If the skin would be irritated after prolonged contact, clean the skin with water and soap.

#### 4.1.3 Eye

If a part of the tape is present in the eye, treat the part as an inert particle. Irrigate with plenty of clean water for 15 minutes. Remove contact lenses for better cleaning.

#### 4.1.4 Ingestion

If a piece of tape is swallowed, rinse out mouth and drink large quantities of water. If necessary obtain medical attention.

### 5. Fire fighting measures

#### 5.1 Extinguishing media

##### 5.1.1 Suitable extinguishing media

Suitable extinguishing media are foam, sand, dry powder, and carbondioxide.

#### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: above the decomposition temperature the major volatiles will be carbondioxide, water carbonmonoxide and small molecular weight organic materials.

The ratio depends on the burning temperature and the presence of oxygen.

### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

The product is a solid and insoluble product. Therefore uncontrolled release (into air or water) is highly unlikely.

### 7. Handling and storage

#### 7.1 Precautions for safe handling

Static electricity: In most processes in which there is movement of foil over metal or other rollers, surface electrical charges develop on the film. Static charges should be eliminated or reduced as much as possible, since they provide a source of ignition for flammable vapours and gasses or may give electrical shocks to operators. Use either passive or active static eliminators to reduce the charges.

Reeling: Machine design and work practices should be organised to remove the danger of trapping parts of the body or clothing in reeled materials and between the film and machinery parts.

Work area: Operators who convert the tape should work in well-ventilated areas.

### 7.2 Conditions for safe storage, including any incompatibilities

For quality reasons store under dry conditions, out of direct sunlight and at temperatures below 30°C.

## 8. Exposure controls / personal protection

### 8.1 Exposure controls

Occupational exposure controls - ensure sufficient ventilation.

#### 8.1.1 Individual protection measures, such as personal protective equipment

##### ■ Eye protection

Eye protection (safety glasses) is only necessary in conversion operations where parts of the tape may be projected to the face.

##### ■ Respiratory protection

Protective mask is not necessary in a normal ventilated work area.

##### ■ Hand protection

Gloves are only necessary to protect hands from sharp edges of some tapes.

##### ■ Skin protection

Apply general measurements of normal hygiene.

### 8.2 Exposure limit values

The product may contain residual solvent.

Toluene (CAS nr. 108-88-3)

European OEL-8h: 192 mg/m<sup>3</sup> or 50 ppm (skin)

European OEL-15min: 384 mg/m<sup>3</sup> or 100 ppm (skin).

### 8.3 Environmental exposure controls

No specific environmental exposure controls values apply.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance: Solid.

b) Colour: Adhesive - clear; Liner: havana (yellow/brown)

c) Odour: Slight smell.

d) pH value: Not defined (solid product).

e) Boiling range: Not defined (solid product).

f) Flash point: Not defined (solid product).

g) Decomposition temperature: Not defined (solid product).

h) Ignition temperature: Not defined (solid product).

i) Relative density: adhesive 1.0 ± 0.1 gr./cm<sup>3</sup>

j) Vapour density: Not applicable.

k) Solubility in water: Negligible.

## 10. Stability and reactivity

### 10.1 Reactivity

The product is stable under normal operating conditions.

## 11. Toxicological information

### 11.1 Information on toxicological effects

Inhalation: Not determined

Skin contact: Not determined

Cytotoxicity: Not determined

Eye contact: Not determined

Ingestion: Not determined

Long term exposure: Not determined

## 12. Ecological information

### 12.1 Toxicity

Not determined.

### 12.2 Persistence and degradability

Parts of the product will slowly degrade under exposure to UV-light.

### 12.3 Bio-accumulative potential

Not applicable.

### 12.4 Mobility (and other compartments if available)

Not applicable.

### 12.5 Results of PBT assessment

Not determined.

### 12.6 Additional information

Adverse effects are not to be expected.

## 13. Disposal considerations

### 13.1 Waste treatment methods

Dispose of in a safe and approved manner in accordance with local regulations.

## 14. Transportation

### 14.1 Special provisions for transport

The material is not a hazardous good by any means for transportation.

## 15. Regulatory information

### 15.1 Note on regulatory information

This Product labeling according to Directive 1999/45/EC: Not applicable.

Other provisions in relation to protection of man or the environment at Community level:

EU Regulation (EC) 1907/2006 REACH

Restrictions and authorization according to REACH: None. The adhesive in this product may contain residual toluene. Purchasers should independently determine prior to use the suitability of the product for their specific application.

EU Directive 2002/95/EC Restrictions of Hazardous substances (RoHS) in electrical and electronic equipment Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), polybrominated diphenyl ether (PBDE) and Decabromo diphenyl ether (decaBDE) are not used or intentionally added to this product.

Natural rubber or latex are not used or intentionally added to this product.

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Date of preparation: 20 August 2014, Issue 1