SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: ALUDUR LA 15 n.l.
Material number: 059901DA001

1.2 Relevant identified uses of the substance or mixture and uses advised against
This information is not available.

1.3 Details of the supplier of the safety data sheet
Company: ECKART GmbH
Guentersthal 4
91235 Hartenstein
Telephone: +499152770
Telefax: +499152777008
E-mail address of person responsible for the SDS: msds.eckart@altana.com

1.4 Emergency telephone number
GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
From outside US: (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free): 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification (REGULATION (EC) No 1272/2008)
Not a dangerous substance according to GHS.
Classification (67/548/EEC, 1999/45/EC)
Not a hazardous substance or mixture.

2.2 Label elements
Labelling (REGULATION (EC) No 1272/2008)
Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

Additional Labelling:
EUH210 Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5, 231-072-3, 01-2119529243-45</td>
<td>F; R11</td>
<td>Flam. Sol. 1; H228</td>
<td>&gt;= 50 - &lt;= 100</td>
</tr>
<tr>
<td>Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene</td>
<td>68411-46-1, 270-128-1, 01-2119491299-23</td>
<td>R52/53</td>
<td>Aquatic Chronic 3; H412</td>
<td>&gt;= 2.5 - &lt; 10</td>
</tr>
<tr>
<td>octylphosphonic acid</td>
<td>4724-48-5, 225-218-5, 01-2119970569-20</td>
<td>C; C; R34 Xn; Xn; R48/22 Xn; Xn; R22</td>
<td>Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT RE 2; H373</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

For explanation of abbreviations see section 16.
If swallowed:
- Keep respiratory tract clear.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:
No information available.

Risks:
No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:
No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- Dry sand
- Special powder against metal fire

Unsuitable extinguishing media:
- ABC powder
- Carbon dioxide (CO2)
- Water
- Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting:
Contact with water liberates extremely flammable gas (hydrogen).

5.3 Advice for firefighters

Special protective equipment for firefighters:
Wear self-contained breathing apparatus for firefighting if necessary.

Further information:
Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Use personal protective equipment.
- Evacuate personnel to safe areas.
- Avoid dust formation.

6.2 Environmental precautions

This information is not available.
6.3 Methods and material for containment and cleaning up

Methods for cleaning up:
- Use mechanical handling equipment.
- Do not use a vacuum cleaner.
- Pick up and arrange disposal without creating dust.
- Sweep up and shovel.
- Do not flush with water.
- Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
This information is not available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:
- Avoid dust formation. Routine housekeeping should be instituted to ensure that
dusts do not accumulate on surfaces.
- Store away from heat.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion:
- Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures:
- General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
- Electrical installations / working materials must comply with the
technological safety standards.

Further information on storage conditions:
- Protect from humidity and water.

Advice on common storage:
- Do not store together with oxidizing and self-igniting products.
- Never allow product to get in contact with water during storage.
- Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Other data:
- No decomposition if stored and applied as directed.

7.3 Specific end use(s)
This information is not available.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>NGV (Total)</td>
<td>5 mg/m³</td>
<td>SE AFS (2011-12-16)</td>
</tr>
</tbody>
</table>

Further information: Inhalable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.3 and having sampling characteristics as specified in paragraph 5.1. Respirable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.11 and having sampling characteristics as specified in paragraph 5.3. Total dust refers to all the particles (aerosols) trapped in a filter in the sampling apparatus described in Methods, Sampling of total dust and respirable dust, method nr 1010, published by the National Board of Occupational Safety and Health, now Work Environment Authority. The filter diameter shall normally be 37 mm but can also be 25 mm. Despite its name, not the total amount of airborne particles is measured by this method.

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>NGV (Respirable)</td>
<td>2 mg/m³</td>
<td>SE AFS (2011-12-16)</td>
</tr>
</tbody>
</table>

Further information: Inhalable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.3 and having sampling characteristics as specified in paragraph 5.1. Respirable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.11 and having sampling characteristics as specified in paragraph 5.3. Total dust refers to all the particles (aerosols) trapped in a filter in the sampling apparatus described in Methods, Sampling of total dust and respirable dust, method nr 1010, published by the National Board of Occupational Safety and Health, now Work Environment Authority. The filter diameter shall normally be 37 mm but can also be 25 mm. Despite its name, not the total amount of airborne particles is measured by this method.

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium (7429-90-5)</td>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – local effects</td>
<td>3,72 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Oral</td>
<td>long term – systemic effects</td>
<td>3,95 mg/kg</td>
</tr>
<tr>
<td>Benzenamine, N-phenyl-, reaction products with 2,4,4-</td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>0,62 mg/kg</td>
</tr>
</tbody>
</table>
### 6.2 Exposure controls

**Personal protective equipment**

<table>
<thead>
<tr>
<th>Material</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye protection</td>
<td>Safety glasses</td>
</tr>
<tr>
<td>Hand protection</td>
<td>Protective gloves</td>
</tr>
</tbody>
</table>

---
Remarks

The suitability for a specific workplace should be discussed with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.

Skin and body protection

Long sleeved clothing

Respiratory protection

Use suitable breathing protection if workplace concentration requires. Breathing apparatus with filter. P1 filter

No personal respiratory protective equipment normally required.

Environmental exposure controls

Water

The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: pellets
Colour: silver
Odour: odourless
Odour Threshold: No data available
pH: No data available
Freezing point: No data available
Boiling point/boiling range: No data available
Flash point: Not applicable

Evaporation rate: No data available
Flammability (solid, gas): The product is not flammable.
Auto-flammability: not auto-flammable
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: No data available
Relative vapour density: No data available
Relative density: No data available
Density: 2.7 g/cm³

Bulk density: No data available
Solubility(ies)
Water solubility: insoluble
Solubility in other solvents: No data available
Partition coefficient: n-octanol/water: No data available
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

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Ignition temperature : > 600 °C
Decomposition temperature : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Flow time : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2 Other information
No data available

SECTION 10: Stability and reactivity

10.1 Reactivity
No decomposition if stored and applied as directed.

10.2 Chemical stability
No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions
Hazardous reactions : Contact with acids and alkalis may release hydrogen.
Stable under recommended storage conditions.
Dust may form explosive mixture in air.

10.4 Conditions to avoid
Conditions to avoid : No data available

10.5 Incompatible materials
Materials to avoid : Acids
Bases
Oxidizing agents
Water

10.6 Hazardous decomposition products
Contact with water or humid air : This information is not available.

Thermal decomposition : This information is not available.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

**Product:**
Acute oral toxicity: Acute toxicity estimate: > 2.000 mg/kg
Method: Calculation method

**Components:**
7429-90-5:
Acute inhalation toxicity: LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Skin corrosion/irritation

**Product:**
Result: No skin irritation
Remarks: Based on available data, the classification criteria are not met.

**Components:**
4724-48-5:
Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

**Product:**
Result: No eye irritation
Remarks: Based on available data, the classification criteria are not met.

**Components:**
4724-48-5:
Remarks: May cause irreversible eye damage.

Further information

**Product:**
Remarks: No data available

**Components:**
4724-48-5:
Remarks: No data available
SECTION 12: Ecological information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment

Product: Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product: Additional ecological information : Remarks: No data available

Components: 4724-48-5:
Additional ecological information : Remarks: No data available

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

13.1 Waste treatment methods
Product : In accordance with local and national regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
In accordance with local and national regulations.
SECTION 14: Transport information

14.1 UN number
14.2 UN proper shipping name
14.3 Transport hazard class(es)
14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for user
   Remarks : Not classified as dangerous in the meaning of transport regulations.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
   Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
   REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
   : Not applicable

15.2 Chemical safety assessment
   This information is not available.

SECTION 16: Other information

Full text of R-Phrases
R11 : Highly flammable.
R22 : Harmful if swallowed.
R34 : Causes burns.
R48/22 : Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements
H228 : Flammable solid.
H302 : Harmful if swallowed.
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H373 : May cause damage to organs through prolonged or repeated exposure if swallowed.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations
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SDS Number: 102000025732
Print Date: 20.11.2018
Date of first issue: 08.03.2017

Acute Tox.: Acute toxicity
Aquatic Chronic: Chronic aquatic toxicity
Eye Dam.: Serious eye damage
Flam. Sol.: Flammable solids
Skin Corr.: Skin corrosion
STOT RE: Specific target organ toxicity - repeated exposure

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SE / EN