SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ALUDUR LA 15 n.l.
Product code : 059901DA001

Manufacturer or supplier's details
Company name of supplier : ECKART GmbH
Address : Guentersthal 4
          Hartenstein  91235
Telephone : +499152770
Telefax : +499152777008
Emergency telephone : CHEMTREC: 800-424-9300
                    CHEMTREC: 1-703-527-3387 (International)
GBK Gefahrgut Buero 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

GHS Classification
Specific target organ systemic toxicity - repeated exposure : Category 2 (Kidney)

GHS label elements
Hazard pictograms :  

Signal Word : Warning
Hazard Statements : H373 May cause damage to organs (Kidney) through prolonged or repeated exposure.
Precautionary Statements:

**Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

**Response:**
P314 Get medical advice/ attention if you feel unwell.

**Disposal:**
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label:
Phosphonic acid, P-octyl-

Other hazards
None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>&gt;= 70 - &lt; 90</td>
</tr>
<tr>
<td>Fatty acids, C14-18 and C16-18-unsatd.</td>
<td>67701-06-8</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Phosphonic acid, P-octyl-</td>
<td>4724-48-5</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
</tbody>
</table>

**SECTION 4. FIRST AID MEASURES**

General advice: Take the victim into fresh air.

No hazards which require special first aid measures.

If inhaled: If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water.

In case of eye contact: Remove contact lenses.
If eye irritation persists, consult a specialist.

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.

Most important symptoms and effects, both acute and delayed: May cause damage to organs through prolonged or repeated exposure.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry sand
Special powder against metal fire

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

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

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

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.
Evacuate personnel to safe areas.
Avoid dust formation.

Methods and materials for containment and 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.

SECTION 7. HANDLING AND STORAGE

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

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.

Hygiene measures:
General industrial hygiene practice.

Conditions for safe storage:
Electrical installations / working materials must comply with
the technological safety standards.

Materials to avoid:
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.

Further information on storage stability:
No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>LMPE-PPT</td>
<td>10 mg/m3</td>
<td>MX OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LMPE-PPT (Dust)</td>
<td>10 mg/m3</td>
<td>MX OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m3 (Aluminum)</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

Personal protective equipment

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

No personal respiratory protective equipment normally required.

Hand protection
Material : Protective gloves

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 breakthrough time can be obtained from the protective glove producer and this has to be observed.

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : pellets
Color : silver
Odor : odorless
Odor Threshold : No data available
pH : No data available
Melting point/freezing point : No data available
Initial boiling point and 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 / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapor pressure : No data available
Relative density : No data available
Density : 2.7 g/cm³
Solubility(ies)
- Water solubility: insoluble
- Partition coefficient: n-octanol/water: No data available
- Autoignition temperature: > 600 °C
- Decomposition temperature: No data available
- Viscosity: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.
Chemical stability: No decomposition if stored and applied as directed.
Possibility of hazardous reactions: Contact with acids and alkalis may release hydrogen. Stable under recommended storage conditions. Dust may form explosive mixture in air.
Conditions to avoid: No data available
Incompatible materials: Acids, Bases, Oxidizing agents, Water

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Ingredients:

Fatty acids, C14-18 and C16-18-unsatd.:
Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity: LC50 (Rat): > 46 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Acute dermal toxicity: LD50 (Rabbit): > 3,160 mg/kg

Phosphonic acid, P-octyl-:
Acute oral toxicity: (Rat): 500 - 2,000 mg/kg
Skin corrosion/irritation
Not classified based on available information.

Ingredients:
Phosphonic acid, P-octyl-:
Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation
Not classified based on available information.

Ingredients:
Phosphonic acid, P-octyl-:
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitization
Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT—single exposure
Not classified based on available information.

STOT—repeated exposure
May cause damage to organs (Kidney) through prolonged or repeated exposure.

Aspiration toxicity
Not classified based on available information.

Further information

Ingredients:
Fatty acids, C14-18 and C16-18-unsatd.: 
Remarks: No data available
Phosphonic acid, P-octyl-:
Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Other adverse effects
No data available

Ingredients:
Fatty acids, C14-18 and C16-18-unsatd.:
Additional ecological information: No data available

Phosphonic acid, P-octyl-:
Additional ecological information: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: 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

International Regulations
Remarks: Not classified as dangerous in the meaning of transport regulations.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation
Special precautions for user
Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Federal Law for the control of chemical precursors, essential chemical products and machinery for producing capsules, tablets and pills.

The ingredients of this product are reported in the following inventories:
DSL : This product contains one or several components listed in the Canadian NDSL.

TSCA : On TSCA Inventory

SECTION 16. OTHER INFORMATION

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
MX OEL : Mexico. Occupational Exposure Limits
ACGIH / TWA : 8-hour, time-weighted average
MX OEL / LMPE-PPT : Time weighted average
AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population
SAFETY DATA SHEET

ALUDUR LA 15 n.l.

Version 1.0
Revision Date: 03/27/2018
SDS Number: 102000025732
Date of last issue: -
Date of first issue: 03/27/2018

(Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Revision Date: 03/27/2018

The information provided in this Material 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.

MX / Z8