SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: STAPA METALLIC 701 Aluminium Paste

Product code: 057304G60M1

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
Long-term (chronic) aquatic hazard: Category 3

GHS label elements
Hazard Statements: H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:
Prevention:
P273 Avoid release to the environment.

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.
Solvent naphtha (petroleum), light arom.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous 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;= 50 - &lt; 70</td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>&gt;= 10 - &lt; 20</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>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Take the victim into fresh air. Do not leave the victim unattended. 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 : Immediately flush eye(s) with plenty of water. 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 : None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry sand
Special powder against metal fire

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

Specific hazards during fire fighting:
Do not allow run-off from fire fighting to enter drains or water courses.

Specific extinguishing methods:
Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions:
Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
Use mechanical handling equipment. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
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:
Keep away from open flames, hot surfaces and sources of...
fire and explosion

Ignition.
Earthing of containers and apparatuses is essential.

Normal measures for preventive fire protection.

Advice on safe handling:
- Keep away from heat and sources of ignition.
- Avoid dust formation.
- Ensure adequate ventilation.

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:
- Store in original container.
- Keep containers tightly closed in a cool, well-ventilated place.
- Keep container closed when not in use.
- Keep away from sources of ignition - No smoking.

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>Components</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</td>
<td>1 mg/m3</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>
STAPA METALLIC 701 Aluminium Paste

(Safety Data Sheet)

Version 1.1
Revision Date: 10/24/2018
SDS Number: 10200000255
Date of last issue: 03/27/2018
Date of first issue: 03/27/2018

TWA (Respirable fraction)

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA (Respirable fraction)</th>
<th>Limit</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>200 mg/m3 (total hydrocarbon vapor)</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td>1 mg/m3 (Aluminum)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Personal protective equipment**

Respiratory protection: Use suitable breathing protection if workplace concentration requires.

Hand protection

Material: Solvent-resistant gloves

Remarks: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended protective skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Safety glasses

Skin and body protection: Long sleeved clothing

Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Pasty solid

Color: silver

Odor: characteristic

Odor Threshold: No data available

pH: No data available
Melting point/freezing point : No data available  
Boiling point/boiling range : 162 °C  
Flash point : No data available  
Evaporation rate : No data available  
Flammability (solid, gas) : Combustible Solids  
Auto-flammability : not auto-flammable  
Burning number : 1  
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 : 1.3 - 2.0 g/cm³  
Solubility(ies)  
   Water solubility : insoluble  
   Partition coefficient: n-octanol/water : No data available  
Autoignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity : No data available  
Explosive properties : Not explosive  

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  
   Reacts with alkalis, acids, halogenes and oxidizing agents.  
   Contact with acids and alkalis may release hydrogen.  
   Mixture reacts slowly with water resulting in evolution of hydrogen.  
   Vapor/air-mixtures are explosive at intense warming.  
   Stable under recommended storage conditions.  
Conditions to avoid : Do not allow to dry.  
   No data available  
Incompatible materials : Acids  
   Bases  
   Oxidizing agents
Highly halogenated compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Components:

Solvent naphtha (petroleum), light arom.:
Acute oral toxicity : LD50 (Rat): 3,492 mg/kg
Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

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

Skin corrosion/irritation
Not classified based on available information.

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

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.
STOTA METALLIC 701 Aluminium Paste

STOT-single exposure
Not classified based on available information.

Components:
Solvent naphtha (petroleum), light arom.:  
Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Components:
Solvent naphtha (petroleum), light arom.:  
May be fatal if swallowed and enters airways.

Further information

Components:
Fatty acids, C14-18 and C16-18-unsatd.:  
Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
Solvent naphtha (petroleum), light arom.:  

Ecotoxicology Assessment
Chronic aquatic toxicity :  Toxic to aquatic life with long lasting effects.

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Other adverse effects
No data available
SAFETY DATA SHEET

STAPA METALLIC 701 Aluminium Paste

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

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
In accordance with local and national regulations.

Contaminated packaging : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

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

49 CFR : Not classified as dangerous in the meaning of transport regulations.

International Regulations
Remarks : Not classified as dangerous in the meaning of transport regulations.

ADR : Not classified as dangerous in the meaning of transport regulations.

IATA-DGR : Not classified as dangerous in the meaning of transport regulations.

IMDG-Code : Not classified as dangerous in the meaning of transport regulations.

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR
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

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 : All components of this product are on the Canadian DSL
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 (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 -
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.