

SILVERSHINE 412 Aluminium Paste

Version 1.1 Revision Date: 09/14/2018 SDS Number: 102000024923 Date of last issue: -
Date of first issue: 03/21/2018

SECTION 1. IDENTIFICATION

Product name : SILVERSHINE 412 Aluminium Paste

Product code : 022579G60

Manufacturer or supplier's details

Company name of supplier : ECKART GmbH

Address : Guentersthal 4
Hartenstein 91235

Telephone : +499152770

Telefax : +499152777008

Emergency telephone number : 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 in accordance with the Hazardous Products Regulations**

Specific target organ toxicity : Category 3 (Respiratory system)
- single exposure

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H335 May cause respiratory irritation.

Precautionary statements : **Prevention:**

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P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
 P271 Use only outdoors or in a well-ventilated area.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.

Disposal:

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

Other hazards

None known.

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

| Chemical name | CAS-No. | Concentration (% w/w) |
|--|------------|-----------------------|
| Aluminum | 7429-90-5 | >= 50 - < 70 |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | >= 20 - < 30 |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | >= 10 - < 20 |

SECTION 4. FIRST AID MEASURES

General advice : Move the victim to fresh air.
 Do not leave the victim unattended.
 Move out of dangerous area.
 Show this safety data sheet to the doctor in attendance.

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.
 Flush eyes with water as a precaution.

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Remove contact lenses.
Keep eye wide open while rinsing.
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 respiratory irritation.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry sand
Special powder against metal fire

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

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

Further information : 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 firefighters : 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.
Use personal protective equipment.
Avoid dust formation.

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- Environmental precautions :
- Prevent product from entering drains.
 - Prevent further leakage or spillage if safe to do so.
 - 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).
 - Do not flush with water.
 - Keep in suitable, closed containers for disposal.
-

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion :
- Keep away from open flames, hot surfaces and sources of ignition.
 - Earthing of containers and apparatuses is essential.
 - Avoid dust formation.
- Advice on safe handling :
- Keep away from heat and sources of ignition.
 - Avoid dust formation.
 - Ensure adequate ventilation.
 - Avoid formation of respirable particles.
 - Do not breathe vapours/dust.
 - Avoid exposure - obtain special instructions before use.
 - For personal protection see section 8.
 - Smoking, eating and drinking should be prohibited in the application area.
 - Provide sufficient air exchange and/or exhaust in work rooms.
 - Dispose of rinse water in accordance with local and national regulations.
- 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.
 - Keep container tightly closed in a dry and well-ventilated place.
 - Observe label precautions.
 - Electrical installations / working materials must comply with the technological safety standards.
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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

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|------------|----------------------------------|--|-----------|
| Aluminum | 7429-90-5 | TWAEV | 10 mg/m ³ | CA QC OEL |
| | | TWA | 10 mg/m ³ | CA AB OEL |
| | | TWA (Respirable) | 1 mg/m ³ | CA BC OEL |
| | | TWA (Dust) | 10 mg/m ³ | CA AB OEL |
| | | TWAEV | 10 mg/m ³ | CA QC OEL |
| | | TWA (Respirable) | 1 mg/m ³ (Aluminium) | CA BC OEL |
| | | TWAEV (Fumes) | 5 mg/m ³ (Aluminium) | CA QC OEL |
| | | TWA (Respirable fraction) | 1 mg/m ³ | ACGIH |
| | | TWA (Respirable fraction) | 1 mg/m ³ (Aluminium) | ACGIH |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | TWA | 200 mg/m ³ (total hydrocarbon vapor) | CA AB OEL |
| | | TWA | 200 mg/m ³ (total hydrocarbon vapor) | ACGIH |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | TWA | 525 mg/m ³ | CA ON OEL |

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| | | |
|--|---|--|
| Odour 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 | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Combustible Solids |
| Auto-flammability | : | not auto-flammable not auto-flammable |
| Burning number | : | 1 |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapour pressure | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.3 - 2.0 g/cm ³ |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Partition coefficient: n-octanol/water | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | : | No data available |
| Explosive properties | : | Not explosive 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. Vapour/air-mixtures are explosive at intense warming. Stable under recommended storage conditions. |

| | | |
|---------------------|---|----------------------|
| Conditions to avoid | : | Do not allow to dry. |
|---------------------|---|----------------------|

No data available

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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

Naphtha (petroleum), hydrotreated heavy:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): Test atmosphere: vapour
Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 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 sensitisation**Skin sensitisation**

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

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Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

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:****Naphtha (petroleum), hydrotreated heavy:**

Remarks: Solvents may degrease the skin.

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

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Bioaccumulative potential

No data available

Other adverse effects

No data available

Components:**Naphtha (petroleum), hydrotreated heavy:**

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. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. In accordance with local and national regulations. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. In accordance with local and national regulations. |

SECTION 14. TRANSPORT INFORMATION**National Regulations****TDG**

Not regulated as a dangerous good

International Regulations**IATA-DGR**

| | | |
|--------------------------------------|---|---|
| UN/ID No. | : | UN 3077 |
| Proper shipping name | : | Environmentally hazardous substance, solid, n.o.s. (aromatic hydrocarbons) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous Dangerous Goods |
| Packing instruction (cargo aircraft) | : | 956 |
| Packing instruction | : | 956 |

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(passenger aircraft)

IMDG-Code

| | | |
|----------------------|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (aromatic hydrocarbons) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |
| Remarks | : | IMDG Code segregation group 7 - Heavy metals and their salts |
| Remarks | : | For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied. |

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

| | | |
|-------------------------------|---|--|
| Canadian PBT Chemicals | : | This product contains the following components on the DSL that are classified as Persistent, Bioaccumulative and/or Toxic (PBT) under CEPA: Naphtha (petroleum), hydrotreated heavy |
| NPRI Components | : | Aluminum |

The components of this product are reported in the following inventories:

| | | |
|------|---|--|
| DSL | : | All components of this product are on the Canadian DSL |
| TSCA | : | On TSCA Inventory |

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

| | | |
|-----------|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| CA AB OEL | : | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL) |
| CA BC OEL | : | Canada. British Columbia OEL |

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CA ON OEL : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

ACGIH / TWA : 8-hour, time-weighted average

CA AB OEL / TWA : 8-hour Occupational exposure limit

CA BC OEL / TWA : 8-hour time weighted average

CA ON OEL / TWA : Time-Weighted Average Limit (TWA)

CA QC OEL / TWAEV : Time-weighted average exposure value

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 - (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

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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

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