

SILVERSHINE 412 Aluminium Paste

Version 1.1 Revision Date: 09/14/2018 SDS Number: 102000024923 Date of last issue: 03/27/2018
Date of first issue: 03/27/2018

SECTION 1. PRODUCT AND COMPANY 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 : 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 - single exposure : Category 3 (Respiratory system)
Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :



Signal Word : Warning

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Hazard Statements : H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.

Response:

P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P391 Collect spillage.

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.

Hazardous ingredients which must be listed on the label:

Solvent naphtha (petroleum), light arom.

Other hazards

None known.

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

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

SECTION 4. FIRST AID MEASURES

General advice : Take the victim into fresh air.
Do not leave the victim unattended.
Move out of dangerous area.

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- Show this material 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.
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. 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.

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Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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|---|---|--|
| Personal precautions, protective equipment and emergency procedures | : | <p>Evacuate personnel to safe areas.
Use personal protective equipment.
Remove all sources of ignition.
Use personal protective equipment.
Avoid dust formation.</p> |
| Environmental precautions | : | <p>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.</p> |
| Methods and materials for containment and cleaning up | : | <p>Use mechanical handling equipment.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).</p> <p>Do not flush with water.
Keep in suitable, closed containers for disposal.</p> |

SECTION 7. HANDLING AND STORAGE

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|---|---|--|
| Advice on protection against fire and explosion | : | <p>Keep away from open flames, hot surfaces and sources of ignition.
Earthing of containers and apparatuses is essential.</p> <p>Avoid dust formation.</p> |
| Advice on safe handling | : | <p>Keep away from heat and sources of ignition.
Avoid dust formation.
Ensure adequate ventilation.</p> <p>Avoid formation of respirable particles.
Do not breathe vapors/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</p> |

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regulations.

- Hygiene measures : Wash hands before breaks and at the end of workday.
- 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.
- 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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Aluminum	7429-90-5	LMPE-PPT	10 mg/m ³	MX OEL
		LMPE-PPT (Dust)	10 mg/m ³	MX OEL
		TWA (Respirable fraction)	1 mg/m ³	ACGIH
		TWA (Respirable fraction)	1 mg/m ³ (Aluminum)	ACGIH
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH

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Personal protective equipment

- Respiratory protection : Use suitable breathing protection if workplace concentration requires.
- In the case of dust or aerosol formation use respirator with an approved filter.
Dust safety masks are recommended when the dust concentration is more than 10 mg/m³.
- 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 preventive 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
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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
Vapor 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
Autoignition 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. 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

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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

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.

STOT-single exposure

May cause respiratory irritation.

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

Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

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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

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

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.
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SECTION 14. TRANSPORT INFORMATION

Domestic regulation

NOM-002-SCT

Not regulated as a dangerous good

Special precautions for user

Remarks : For single packagings $\leq 5L / 5 \text{ kg}$, or combination packagings containing inner packagings $\leq 5L / 5 \text{ kg}$ net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

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 (passenger aircraft) : 956

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 $\leq 5L / 5 \text{ kg}$, or combination packagings containing inner packagings $\leq 5L / 5 \text{ kg}$ net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

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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, : Not applicable
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 -

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(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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