

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name : SILVERSHINE 406 Aluminiumpaste
Material number : 026925G60

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 : msds.eckart@altana.com
Responsible/issuing person

1.4 Emergency telephone number**NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

SECTION 2: Hazards identification**GHS Classification**

: Flammable solids, Category 1, H228
Skin corrosion/irritation, Category 3, H316
Serious eye damage/eye irritation, Category 2A, H319

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

Specific target organ toxicity - single exposure, Category 3,
Respiratory system, Central nervous system, H335H336
Long-term (chronic) aquatic hazard, Category 2, H411

GHS-Labelling

Symbol(s)



Signal word

: Danger

Hazard statements

: H228: Flammable solid.
H316: Causes mild skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P261 Avoid breathing dust.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
P304 + P340 + P319 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

P332 + P317 If skin irritation occurs: Get medical help.

P337 + P317 If eye irritation persists: Get medical help.

P391 Collect spillage.

P370 + P378 In case of fire: Use for extinction: Special
powder for metal fires.

P370 + P378 In case of fire: Use for extinction: Dry sand.

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 components which must be listed on the label

Identification	CAS-No.
Solvent naphtha (petroleum), light arom.	64742-95-6

SECTION 3: Composition/information on ingredients

Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
Solvent naphtha (petroleum), light arom.	64742-95-6	Flam. Liq.;3;H226 Acute Tox.;5;H303 Acute Tox.;5;H313 STOT SE;3;H335, H336 Asp. Tox.;1;H304 Aquatic Chronic;2;H411	25 - 50

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	Flam. Liq.;4;H227 Asp. Tox.;1;H304	1 - 10
Poly(oxy-1,2-ethanediyl), alphasotridecyl-omega-hydroxy-, phosphate	73038-25-2	;2;H315 ;1;H318 Aquatic Chronic;3;H412	1 - 2,5

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

SECTION 4: First aid measures**4.1 Description of 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.
Do not leave the victim unattended.
- If inhaled : Remove to fresh air.
Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water.
Immediately flush eye(s) with plenty of water.
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.

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

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

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

High volume water jet

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment.

Wear self-contained breathing apparatus for firefighting if necessary.

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. For safety reasons in case of fire, cans should be stored separately in closed containments. Use extinguishing measures that are appropriate to local circumstances and the surrounding

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

environment. Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

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

6.2 Environmental precautions

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.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

- 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. Avoid contact with skin and eyes. 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. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
- Advice on protection against fire and explosion : Earthing of containers and apparatuses is essential. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.
- Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from open flames, hot surfaces and sources of ignition.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : 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.
- No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : Protect from humidity and water. Do not allow to dry.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

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

Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	AGW (Inhalable fraction)	10 mg/m ³	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
aluminium	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m ³	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Solvent naphtha (petroleum), light arom.	64742-95-6	AGW	100 mg/m ³	2009-02-16	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Group exposure limit for hydrocarbon solvent mixtures Commission for dangerous substances See also No. 2.9			

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

		of the TRGS 900			
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha	64742-48-9	AGW	300 mg/m ³	2017-11-30	DE TRGS 900
Peak-limit: excursion factor (category)		2; (II)			
Further information		Group exposure limit for hydrocarbon solvent mixtures Commission for dangerous substances See also No. 2.9 of the TRGS 900			

8.2 Exposure controls

Personal protective equipment

- Eye protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- Hand protection
- Material : Solvent-resistant gloves (butyl-rubber)
- 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

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

- Skin should be washed after contact.
The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
: Long sleeved clothing
Safety shoes
: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- 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.

Environmental exposure controls

- General advice :
: 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.
- 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 : Pasty solid
- Colour : silver

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

Odour	: characteristic
pH	: substance/mixture is non-soluble (in water)
Freezing point	: No data available
Boiling point/boiling range	: 140 °C
Flash point	: 41 °C
Bulk density	: No data available
Flammability (solid, gas)	: The substance or mixture is a flammable solid with the category 1.
Auto-flammability	: not auto-flammable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: No data available
Water solubility	: No data available
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Explosive properties	: Not explosive Vapours may form explosive mixture with air. Not explosive Not explosive Not explosive Vapours may form explosive

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

mixture with air.

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 : 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.
Vapours may form explosive mixture with air.

No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Do not allow to dry.
Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Acids
Bases
Oxidizing agents
Highly halogenated compounds

10.6 Hazardous decomposition products

Hazardous decomposition : No data available

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

products

Other information : No data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****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; Low boiling point ydrogen treated naphtha :

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

Acute inhalation toxicity : LC50 Rat: Test atmosphere: vapour

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**Product**

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation**Product**

May cause irreversible eye damage.

Respiratory or skin sensitisation

No data available

Carcinogenicity

No data available

Toxicity to reproduction/fertility

No data available

Reprod.Tox./Development/Teratogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

Further information**Product**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.,
Concentrations substantially above the TLV value may cause narcotic effects., Solvents may
degrease the skin.

SECTION 12: Ecological information**12.1 Toxicity****Components:****Solvent naphtha (petroleum), light arom. (64742-95-6) :****Ecotoxicology Assessment**

Long-term (chronic) aquatic hazard : Toxic to aquatic life with long lasting effects.

Poly(oxy-1,2-ethanediyl), alphasotridecyl-omega-hydroxy-, phosphate (73038-25-2) :**Ecotoxicology Assessment**

Long-term (chronic) aquatic hazard : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects**Product:**Additional ecological
information: An environmental hazard cannot be excluded in the event of
unprofessional handling or disposal., Toxic to aquatic life with
long lasting effects.**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product	: 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.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information**14.1 UN number**

ADR	: 1325
TDG	: 1325
CFR	: 1325

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

IMDG : 1325**IATA** : 1325**14.2 Proper shipping name****ADR** : FLAMMABLE SOLID, ORGANIC, N.O.S.
(Aluminium pigment paste ,Solvent naphtha)**TDG** : FLAMMABLE SOLID, ORGANIC, N.O.S.
(Aluminium pigment paste)**CFR** : FLAMMABLE SOLIDS, ORGANIC, N.O.S.
(Aluminum pigment paste)**IMDG** : FLAMMABLE SOLID, ORGANIC, N.O.S.
(,Aluminium pigment paste ,Solvent naphtha)**IATA** : FLAMMABLE SOLID, ORGANIC, N.O.S.
(Aluminium pigment paste)**14.3 Transport hazard class****ADR** : 4.1**TDG** : 4.1**CFR** : 4.1**IMDG** : 4.1**IATA** : 4.1**14.4 Packing group****ADR**

Packaging group : II

Classification Code : F1

Hazard Identification Number : 40

Labels : 4.1

Tunnel restriction code : (E)

TDG

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

Packaging group : II
Labels : 4.1

CFR

Packaging group : II
Labels : 4.1

IMDG

Packaging group : II
Labels : 4.1
EmS Number : F-G, S-G

IATA

Packing instruction (cargo aircraft) : 448
Packing instruction (passenger aircraft) : 445
Packing instruction (LQ) : Y441
Packaging group : II
Labels : 4.1

14.5 Environmental hazards

IMDG : Marine pollutant
ADR : Environmentally hazardous

14.6 Special precautions for user

IMDG Code- segregation group:
: IMDG Code segregation group 15 - Powdered metals

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Prohibition/Restriction**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Prohibition/Restriction

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Prohibition/Restriction

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Prohibition/Restriction

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Banned and/or restricted
(Solvent naphtha (petroleum), light arom.)
(Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha)
(Poly(oxy-1,2-ethanediyl), alphaisotridecyl-omega-hydroxy-, phosphate)

15.2 Chemical safety assessment

No data available

Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

SILVERSHINE 406 Aluminiumpaste

Version 1.0

Revision Date 22.11.2021

Print Date 02.12.2024

SECTION 16: Other information**Full text of H-Statements**

H226	: Flammable liquid and vapour.
H227	: Combustible liquid.
H228	: Flammable solid.
H303	: May be harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H313	: May be harmful in contact with skin.
H315	: Causes skin irritation.
H316	: Causes mild skin irritation.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.

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.