SILVERSHINE S 2100

Version 3.0 Revision Date 05.12.2019 Print Date 03.12.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	:	SILVERSHINE S 2100
Material number	:	051980G60

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

: Specific target organ toxicity - single exposure, Category 3, Respiratory system, Central nervous system, H335H336
Long-term (chronic) aquatic hazard, Category 3, H412

GHS-Labelling

Symbol(s) :

Signal word : Warning

Hazard statements : H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H412: Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
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.
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

Other hazards which do not result in classification

Combustible Solids

SECTION 3: Composition/information on ingredients

Substance name : silvershine s 2100

Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	25 - 50
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	Flam. Liq.;4;H227 Asp. Tox.;1;H304	25 - 50
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	20 - 25

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.

If inhaled	:	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.
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.

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, ABC powder, Carbon dioxide (CO2)

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	:	Use personal protective equipment.

for firefighters

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.

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.
Remove all sources of ignition.
Use personal protective equipment.
Avoid dust formation.

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).
Do not flush with water.
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

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.
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.
Hygiene measures	:	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. 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.
Further information on storage conditions	:	Protect from humidity and water. Do not allow to dry.
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 powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
aluminium powder (stabilised)	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
Naphtha	64742-48-	AGW	300 mg/m3	2017-11-30	DE TRGS 900

(petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	9				
Peak-limit: excursion factor (category)		2;(II)			
Further information		Group exposure limit for hydrocarbon solvent mixturesCommission for dangerous substancesSee also No. 2.9 of the TRGS 900			
Solvent naphtha (petroleum), light arom.	64742-95-6	AGW	100 mg/m3	2009-02-16	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Group exposure limit for hydrocarbon solvent mixturesCommission for dangerous substancesSee also No. 2.9 of the TRGS 900			

United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m3	2013-10-08	

aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m3	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m3	1989-01-19	
aluminium powder	7429-90-5	TWA (welding fumes)	5 mg/m3	2013-10-08	

(stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m3	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m3	2017-10-02	
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	TWA	500 ppm 2 000 mg/m3	2007-01-01	
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	TWA	400 ppm 1 600 mg/m3	1989-01-19	
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	500 ppm 2 000 mg/m3	2007-01-01	
Solvent naphtha	64742-95-6	TWA	200 mg/m3	2010-03-01	

(petroleum), light arom.					
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	400 ppm 1 600 mg/m3	1989-01-19	

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

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.

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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.

	:	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
Odour	:	characteristic
pH	:	No data available
Freezing point	:	No data available
Boiling point/boiling range	:	162 °C
Flash point	:	No data available
Bulk density	:	No data available

Flammability (solid, gas)	:	Combustible Solids
Auto-flammability	:	not auto-flammable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Density	:	1,1 - 1,5 g/cm3
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

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. Vapour/air-mixtures are explosive at intense warming. Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid	:	Do not allow to dry. No data available

10.5 Incompatible materials

Materials to avoid	:	Acids Bases Oxidizing agents Highly halogenated compounds

10.6 Hazardous decomposition products

Hazardous decomposition products	:	No data available
Other information	:	No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

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

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

No data available

Serious eye damage/eye irritation

Product

Product dust may be irritating to eyes, skin and respiratory system.

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

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 : Toxic to aquatic life with long lasting effects.

hazard

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

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., Harmful 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.

Contaminated packaging	:	Send to a licensed waste management company. In accordance with local and national regulations. 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

14.1 UN number

14.2 Proper shipping name

14.3 Transport hazard class

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

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

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

15.2 Chemical safety assessment

No data available

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.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

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.