

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

Stapa AE Reflexal 4 n.l. Aluminium Paste

Version 2.0

Revision Date 10.12.2019

Print Date 02.12.2024

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

1.1 Product identifier

Trade name : Stapa AE Reflexal 4 n.l. Aluminium Paste
Material number : 024624G60

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
Serious eye damage/eye irritation, Category 2A, H319
Specific target organ toxicity - single exposure, Category 3,

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Central nervous system, H336

GHS-Labeling

Symbol(s)

:



Signal word

:

Danger

Hazard statements

:

H228: Flammable solid.

H319: Causes serious eye irritation.

H336: May cause drowsiness or dizziness.

Precautionary statements

:

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

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.

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.

Hazardous components which must be listed on the labelIdentification
ethyl acetateCAS-No.
141-78-6**SECTION 3: Composition/information on ingredients**

Substance name

: AE REFLEXAL 4NL 53444/G

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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	50 - 100
ethyl acetate	141-78-6 205-500-4	Flam. Liq.;2;H225 Eye Irrit.;2A;H319 STOT SE;3;H336	25 - 50
Fatty acids, C14-18 and C16-18- unsatd.	67701-06-8 266-930-6	Acute Tox.;5;H313	1 - 10

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.
If on skin, rinse well with water.
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.

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If swallowed

Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
: 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, Carbon dioxide (CO₂), ABC powder

5.2 Special hazards arising from the substance or mixture

This information is not available.

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 : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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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.
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).
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. Avoid contact with skin and eyes. For personal

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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 : Earthing of containers and apparatuses is essential. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment.

Avoid dust formation. 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. 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)

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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/m ³	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/m ³	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).				
ethyl acetate	141-78-6	AGW	200 ppm 730 mg/m ³	2017-06-08	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

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ethyl acetate	141-78-6	STEL	400 ppm 1 468 mg/m ³	2017-02-01	2017/164/EU
Further information		Indicative			
ethyl acetate	141-78-6	TWA	200 ppm 734 mg/m ³	2017-02-01	2017/164/EU
Further information		Indicative			

8.2 Exposure controls

Personal protective equipment

- Eye protection : 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
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

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Respiratory protection : concentration of the dangerous substance at the work place.
: Use suitable breathing protection if workplace concentration requires.
: In the case of dust or aerosol formation use respirator with an approved filter.

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 : 76 °C
Flash point : -4 °C

Bulk density : No data available
Flammability (solid, gas) : The substance or mixture is a flammable solid with the category 1.

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Auto-flammability	: not auto-flammable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 2,07 g/cm ³
Solubility(ies)	
Water solubility	: insoluble
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.

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

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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.

Stable under recommended storage conditions.

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 products : No data available

Other information : No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

ethyl acetate :

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Acute oral toxicity : Rat: 5 620 mg/kg

Acute inhalation toxicity : LC50 Rat: 56 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 Rabbit: > 18 000 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**Product**

May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product**

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Eye irritation

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.

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SECTION 12: Ecological information**12.1 Toxicity****Components:****ethyl acetate (141-78-6) :**Toxicity to daphnia and other : (Daphnia (water flea)): 717 mg/l
aquatic invertebrates**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 : No data available
information

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SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product	: Do not dispose of waste into sewer. 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. Do not burn, or use a cutting torch on, the empty drum. In accordance with local and national regulations.

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

ADR	: 1325
TDG	: 1325
CFR	: 1325
IMDG	: 1325
IATA	: 1325

14.2 Proper shipping name

ADR	: FLAMMABLE SOLID, ORGANIC, N.O.S. (Aluminium pigment paste)
TDG	: FLAMMABLE SOLID, ORGANIC, N.O.S. (Aluminium pigment paste)
CFR	: FLAMMABLE SOLIDS, ORGANIC, N.O.S. (Aluminum pigment paste)

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IMDG : FLAMMABLE SOLID, ORGANIC, N.O.S.
(,Aluminium pigment paste)

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

Packaging group : II

Labels : 4.1

CFR

Packaging group : II

Labels : 4.1

IMDG

Packaging group : II

Labels : 4.1

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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** :**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

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 : Not applicable

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deplete the ozone layer

Prohibition/Restriction

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

H225	: Highly flammable liquid and vapour.
H228	: Flammable solid.
H313	: May be harmful in contact with skin.
H319	: Causes serious eye 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.