according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

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

Product code : 024624G60

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the : Colouring agents, pigments

Substance/Mixture

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 of person

responsible for the SDS

: msds.eckart@altana.com

1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe)

Call and response in your language is possible.

Contract no.: ECKART29003-NCEC.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable solids, Category 1 H228: Flammable solid.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Specific target organ toxicity - single H336: May cause drowsiness or dizziness.

exposure, Category 3, Central nervous

system

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

Hazard pictograms :





Signal word : Danger

Hazard statements : H228 Flammable solid.

H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Supplemental Hazard

Statements

EUH066 Repeated exposure may cause skin

dryness or cracking.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

P261 Avoid breathing dust.

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 label:

ethyl acetate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	ClassificationREGUL ATION (EC) No 1272/2008	Concentration (% w/w)
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1	Flam. Sol. 1; H228	>= 50 - <= 100

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

ethyl acetate	01-2119529243-45 141-78-6 205-500-4 607-022-00-5	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system)	>= 25 - < 50
		EUH066	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move the victim to fresh air.

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.

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

Risks : Causes serious eye irritation.

May cause drowsiness or dizziness.

Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry sand

Special powder against metal fire

Unsuitable extinguishing

media

Carbon dioxide (CO2)

ABC powder

Water Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

Contact with water liberates extremely flammable gas

(hydrogen).

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.

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

General advice : The product should not be allowed to enter drains, water

courses or the soil.

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 material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Soak up with inert absorbent material (e.g. sand, silica gel,

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

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 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

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability

: No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40	
		TWA (Respirable fraction)	4 mg/m3	GB EH40	
		TWA (inhalable dust)	10 mg/m3	GB EH40	
	Further information: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols., The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.				
		TWA (Respirable dust)	4 mg/m3	GB EH40	
	inhalable dust when samplin MDHS14/4 Go respirable, tho	t are those fractions og is undertaken in a eneral methods for s oracic and inhalable	ses of these limits, respirable of airborne dust which will be ccordance with the methods campling and gravimetric ana aerosols., The COSHH defined the cost of any kind when	collected described in lysis or ition of a	

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/4., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with. Where no specific short-term exposure limit is listed. a figure three times the long-term exposure limit should be used. GB EH40 141-78-6 TWA 200 ppm ethyl acetate 734 mg/m3 STEL 400 ppm GB EH40 1,468 mg/m3 2017/164/EU STEL 400 ppm 1,468 mg/m3 Further information: Indicative TWA 200 ppm 2017/164/EU 734 mg/m3 Further information: Indicative

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
aluminium powder (stabilised)	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic effects	3.95 mg/kg
ethyl acetate	Workers	Inhalation	Long-term systemic effects	734 mg/m3
	Workers	Inhalation	Long-term local effects	734 mg/m3
	Workers	Inhalation	Acute systemic effects	1468 mg/m3
	Workers	Dermal	Long-term systemic effects	63 mg/kg
	Workers	Inhalation	Acute local effects	1468 mg/m3
	Consumers	Inhalation	Long-term systemic effects	367 mg/m3
	Consumers	Inhalation	Long-term local effects	367 mg/m3
	Consumers	Inhalation	Acute systemic	734 mg/m3

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

			effects	
Cons	sumers	Inhalation	Acute local effects	734 mg/m3
Cons	sumers	Dermal	Long-term systemic effects	37 mg/kg
Work	cers	Dermal	Long-term local effects	63 mg/kg
Cons	sumers	Oral	Long-term systemic effects	4.5 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment Value	
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l
ethyl acetate	Fresh water	0.24 mg/l
	Marine water	0.024 mg/l
	STP	650 mg/l
	Fresh water sediment	1.15 mg/kg
	Marine sediment	0.115 mg/kg
	Soil	0.148 mg/kg
	periodical release	1.65 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face 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.

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.

Respiratory protection : Use suitable breathing protection if workplace concentration

requires.

A member of ALTANA

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : Pasty solid

Colour : silver

Odour : characteristic

Odour Threshold : No data available

Freezing point : No data available

Boiling point/boiling range : 77 °C

Flammability : The substance or mixture is a flammable solid with the

category 1.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : -4 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : substance/mixture is non-soluble (in water)

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Vapour pressure : No data available

Relative density : No data available

Density : 1.3 - 2.0 g/cm3

Relative vapour density : No data available

Particle characteristics

Particle Size Distribution : No data available

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

9.2 Other information

Explosives : Not explosive

Vapours may form explosive mixture with air.

Self-ignition : not auto-flammable

Miscibility with water : immiscible

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. 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

This information is not available.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified based on available information.

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

Components:

aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

ethyl acetate:

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

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Product:

Remarks : May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : Eye irritation

Components:

ethyl acetate:

Result : Eye irritation

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.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

STOT - single exposure

May cause drowsiness or dizziness.

Components:

ethyl acetate:

Assessment : May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Further information

Product:

Remarks : 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:

ethyl acetate:

Toxicity to daphnia and other :

aquatic invertebrates

(Daphnia (water flea)): 717 mg/l

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

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological

information

: No data available

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

European Waste Catalogue : 10 03 21 - other particulates and dust (including ball-mill dust)

containing hazardous substances

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 or ID number

ADR : UN 1325 IMDG : UN 1325 IATA : UN 1325

14.2 UN proper shipping name

ADR : FLAMMABLE SOLID, ORGANIC, N.O.S.

(Aluminium pigment paste)

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(es)

Class Subsidiary risks

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

ADR : 4.1 IMDG : 4.1 IATA : 4.1

14.4 Packing group

ADR

Packing group : II
Classification Code : F1
Hazard Identification Number : 40
Labels : 4.1
Tunnel restriction code : (E)

IMDG

Packing group : II Labels : 4.1

EmS Code : F-G, S-G

Remarks : IMDG Code segregation group 15 - Powdered metals

448

IATA (Cargo)

Packing instruction (cargo

aircraft)

Packing instruction (LQ) : Y441
Packing group : II
Labels : 4.1

IATA (Passenger)

Packing instruction : 445

(passenger aircraft)

Packing instruction (LQ) : Y441
Packing group : II
Labels : 4.1

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be

considered:

aluminium powder (stabilised)

(Number on list 40)

ethyl acetate (Number on list 3) ethanol (Number on list 3)

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

: Not applicable

15.2 Chemical safety assessment

No data available

GB EH40

SECTION 16: Other information

Full text of H-Statements

H225 : Highly flammable liquid and vapour.

H228 : Flammable solid.

H319 : Causes serious eye irritation. H336 : May cause drowsiness or dizziness.

EUH066 : Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Flam. Sol. : Flammable solids

STOT SE : Specific target organ toxicity - single exposure

2017/164/EU : Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values

: UK. EH40 WEL - Workplace Exposure Limits

2017/164/EU / STEL : Short term exposure limit 2017/164/EU / TWA : Limit Value - eight hours

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -

according to Regulation (EC) No. 1907/2006



Stapa AE Reflexal 4 n.l. Aluminium Paste

Version Revision Date: SDS Number: Print Date: 16.04.2024

4.1 28.02.2024 102000031392 Date of first issue: 27.03.2019

Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: Classification procedure:

Flam. Sol. 1 H228 Based on product data or assessment

Eye Irrit. 2 H319 Calculation method STOT SE 3 H336 Calculation method

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.

GB / EN