STAPA HYDROXAL E 4000 Aluminium Paste

Version	Revision Date:	SDS Number:	Print Date: 16.02.2023
4.0	14.02.2023	102000036123	Date of first issue: 15.12.2022

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

1.1 Product identifier

Trade name : STAPA HYDROXAL E 4000 Aluminium Paste

Product code : 027512KA0

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

Use of the Substance/Mixture : Colouring agents, pigments

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)

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a dangerous substance according to GHS.

Additional Labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

Combustible Solids

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	ClassificationREGULATION (EC) No 1272/2008	Concentration (% w/w)
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1 01-2119529243-45	Flam. Sol. 1; H228	>= 50 - <= 100
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	95-38-5 202-414-9 01-2119777867-13	Acute Tox. 4; H302 Skin Corr. 1C; H314 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——— M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1	>= 3 - < 5
octylphosphonic acid	4724-48-5 225-218-5 01-2119970569-20	Acute Tox. 4; H302 Skin Corr. 1; H314 Eye Dam. 1; H318 STOT RE 2; H373 (Kidney) ——— Acute toxicity estimate Acute oral toxicity: 500 mg/kg	>= 1 - < 3

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.

Do not leave the victim unattended.

If inhaled : Remove to fresh air.
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.

Remove contact lenses.
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

None known.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry sand
Special powder against metal fire

Unsuitable extinguishing media : ABC powder
Carbon dioxide (CO2)
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 : Wear self-contained breathing apparatus for firefighting if necessary.

Further information	:	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. Avoid dust formation.

6.2 Environmental precautions

Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil. 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, acid binder, universal binder, sawdust). Pick up and arrange disposal without creating dust. Sweep up and shovel. 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	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Advice on protection against fire and explosion	:	Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures	:	General industrial hygiene practice.

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 away from sources of ignition - No smoking. Keep container closed when not in use.

Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : Do not store near acids.
Do not store together with oxidizing and self-igniting products.
Keep away from oxidizing agents and strongly acid or alkaline materials.
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

No materials to be especially mentioned.

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
	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.			

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
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Workers	Skin contact	Long-term systemic effects	0.06 mg/kg
	Workers	Inhalation	Long-term systemic effects	0.46 mg/m3
	Workers	Skin contact	Acute systemic effects	2 mg/kg
	Workers	Inhalation	Acute systemic	14 mg/m3

			effects	
octylphosphonic acid	Workers	Inhalation	Long-term systemic effects	0.14 mg/m3
	Workers	Skin contact	Long-term systemic effects	4 mg/kg
	Consumers	Inhalation	Long-term systemic effects	0.071 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.02 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
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	Fresh water	0.00003 mg/l
	Marine water	0.000003 mg/l
	Fresh water sediment	0.376 mg/kg
	Marine sediment	0.0376 mg/kg
	Soil	0.075 mg/kg
	clarification plant	0.27 mg/l
	Sporadic Release	0.0003 mg/l
octylphosphonic acid	Fresh water	0.04 mg/l
	Marine water	0.004 mg/l
	STP	100 mg/l
	Fresh water sediment	0.49 mg/kg
	Marine sediment	0.049 mg/kg
	Soil	0.075 mg/kg
	Intermittent use/release	0.4 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Goggles

Safety glasses

Skin and body protection : Protective suit

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Pasty solid

Colour : silver

Odour	:	characteristic
Odour Threshold	:	No data available
Freezing point	:	No data available
Boiling point/boiling range	:	> 100 °C
Flammability	:	Combustible Solids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	Not relevant
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 Size Distribution	:	

9.2 Other information

Explosives	:	Not explosive
Self-ignition	:	No data available

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 : Contact with acids and alkalis may release hydrogen.

Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

No data available

10.5 Incompatible materials

Materials to avoid : Acids
Bases
Oxidizing agents

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.

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

octylphosphonic acid:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg

Acute toxicity estimate: 500 mg/kg
Method: Calculation method

Skin corrosion/irritation

Not classified based on available information.

Product:

Result : No skin irritation
Remarks : Based on available data, the classification criteria are not met.

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Result : Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

Remarks : Extremely corrosive and destructive to tissue.

octylphosphonic acid:

Result : Corrosive after 4 hours or less of exposure

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Result : No eye irritation
Remarks : Based on available data, the classification criteria are not met.

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Result : No eye irritation

Remarks : May cause irreversible eye damage.

octylphosphonic acid:

Result : Irreversible effects on the eye

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.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Assessment	:	May cause damage to organs through prolonged or repeated exposure.

octylphosphonic acid:

Target Organs	:	Kidney
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity
Not classified based on available information.

11.2 Information on other hazards

Further information

Product:

Remarks	:	No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

M-Factor (Short-term (acute) aquatic hazard) : 10

M-Factor (Long-term (chronic) aquatic hazard) : 1

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic 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

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.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological : No data available

information

Components:

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

octylphosphonic acid:

Additional ecological information : No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : UN 9999
Not permitted for transport

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not permitted for transport

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not permitted for transport

14.4 Packing group

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo)	:	Not permitted for transport
IATA (Passenger)	:	Not permitted for transport

14.5 Environmental hazards

ADR	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good

14.6 Special precautions for user

Remarks	:	Not classified as dangerous in the meaning of transport regulations. Due to the risk of hydrogen development we recommend to refrain from airfreighting this/these product(s).

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.

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) 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (Number on list 3) 2-phenoxyethanol (Number on list 3)
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H228	:	Flammable solid.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Flam. Sol.	:	Flammable solids
Skin Corr.	:	Skin corrosion
STOT RE	:	Specific target organ toxicity - repeated exposure
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA 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; AIIC - 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 - 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

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