# STAPA HYDROXAL V 2020 Aluminium Paste

| Version | Revision Date: | SDS Number: | Print Date: 20.05.2022 |
|---|---|---|---|
| 3.1 | 22.09.2021 | 102000029818 | Date of first issue: 27.07.2018 |

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

### 1.1 Product identifier

Trade name : STAPA HYDROXAL V 2020 Aluminium Paste

Product code : 024045KA0

### 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 dangerous substance according to GHS.

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

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

**Hazardous components**

| Chemical name | CAS-No.<br>EC-No.<br>Index-No.<br>Registration number | Classification REGULATION (EC) No 1272/2008 | Concentration (% w/w) |
|---|---|---|---|
| aluminium powder (stabilised) | 7429-90-5<br>231-072-3<br>013-002-00-1<br>01-2119529243-45 | Flam. Sol. 1; H228 | >= 50 - <= 100 |
| Phosphoric acid, C11-14-isoalkyl esters, C13-rich | 154518-38-4<br>(52933-07-0)<br><br>01-2119976356-25 | Skin Irrit. 2; H315<br>Eye Dam. 1; H318<br>Aquatic Chronic 2; H411 | >= 3 - < 10 |

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.

No hazards which require special first aid measures.

If inhaled : 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 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

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 : 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 : 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.
Avoid dust formation.

### 6.2 Environmental precautions

### 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).

Sweep up and shovel.
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 : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

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.

Further information on storage stability : 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

**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 |
| Further information | 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., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used. | | | |
| | | TWA (Respirable | 4 mg/m3 | GB EH40 |

| | | | | |
|---|---|---|---|---|
| | | fraction) | | |
| Further information | 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., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used. | | | |
| | | 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 | | | |

| | |
|---|---|
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**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 local effects | 3.72 mg/m3 |
| | Consumers | Oral | Long-term systemic effects | 3.95 mg/kg |
| | Workers | Inhalation | Long-term systemic effects | 3.72 mg/m3 |
| Phosphoric acid, C11-14-isoalkyl esters, C13-rich | Workers | Inhalation | Long-term systemic effects | 34.94 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 100.13 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 10.43 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 60.08 mg/kg |
| | Consumers | Ingestion | Long-term systemic effects | 6.01 mg/kg |
| 2,2',2''-nitrilotriethanol | Workers | Inhalation | Long-term local effects | 5 mg/m3 |
| | Workers | Skin contact | Long-term systemic effects | 6.3 mg/kg |
| | Workers | Inhalation | Long-term systemic effects | 5 mg/m3 |
| | Consumers | Inhalation | Long-term local effects | 1.25 mg/m3 |
| | Consumers | Ingestion | Long-term systemic effects | 13 mg/kg |
| | Consumers | Skin contact | Long-term systemic effects | 3.1 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 1.25 mg/m3 |

**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 |
| Phosphoric acid, C11-14-isoalkyl esters, C13-rich | Fresh water | 6.31 µg/l |
| | Fresh water sediment | 0.113 mg/kg |

| | | |
|---|---|---|
| | Sporadic Release | 63.1 µg/l |
| | Marine water | 0.631 µg/l |
| | Marine sediment | 0.0113 mg/kg |
| | STP | 10 mg/l |
| | Soil | 0.0188 mg/kg |
| 2,2',2''-nitrilotriethanol | Soil | 0.151 mg/kg |
| | Fresh water | 0.32 mg/l |
| | Fresh water sediment | 1.7 mg/kg |
| | clarification plant | 10 mg/l |
| | Marine water | 0.032 mg/l |
| | Marine sediment | 0.17 mg/kg |

### 8.2 Exposure controls

**Personal protective equipment**

Eye protection : Goggles

Safety glasses

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

**Environmental exposure controls**

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

Odour Threshold : No data available

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

Freezing point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids

Self-ignition : No data available

| | |
|---|---|
| Auto-ignition temperature | : No data available |
| Smoldering temperature | : No data available |
| Decomposition temperature | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Upper explosion limit / Upper flammability limit | : No data available |
| Lower explosion limit / Lower flammability limit | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density | : No data available |
| Relative density | : No data available |
| Density | : 1.3 - 2.0 g/cm3 |
| Bulk density | : No data available |
| Solubility(ies) | |
| Water solubility | : partly miscible |
| Solubility in other solvents | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, dynamic | : No data available |
| Viscosity, kinematic | : No data available |
| Flow time | : No data available |

### 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 : 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

Contact with water or humid air : This information is not available.

Thermal decomposition : This information is not available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

Not classified based on available information.

**Components:**

**aluminium powder (stabilised):**

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

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: No skin irritation

**Components:**

**Phosphoric acid, C11-14-isoalkyl esters, C13-rich:**

Result: Skin irritation

**Serious eye damage/eye irritation**
Not classified based on available information.

**Product:**
Result: No eye irritation

**Components:**

**Phosphoric acid, C11-14-isoalkyl esters, C13-rich:**
Result: Corrosive

**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.

**Aspiration toxicity**
Not classified based on available information.

**Further information**

**Product:**
Remarks: No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

**Product:**

**Ecotoxicology Assessment**
Short-term (acute) aquatic : This product has no known ecotoxicological effects.

hazard

Long-term (chronic) aquatic hazard : This product has no known ecotoxicological effects.

**Components:**

**Phosphoric acid, C11-14-isoalkyl esters, C13-rich:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 24 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6.31 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (algae): 150 mg/l
Exposure time: 72 h

### 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 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 : In accordance with local and national regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.
In accordance with local and national regulations.

## SECTION 14: Transport information

### 14.1 UN number

| | | |
|---|---|---|
| **ADR** | : | Not regulated as a dangerous good |
| **IMDG** | : | Not regulated as a dangerous good |
| **IATA** | : | 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.<br>Due to the risk of hydrogen development we recommend to refrain from airfreighting this/these product(s). |

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

## 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 (EU) 2019/1021 on persistent organic pollutants (recast) | : | Not applicable |
| UK REACH List of substances subject to authorisation (Annex XIV) | : | Not applicable |
| REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) | : | Conditions of restriction for the following entries should be considered:<br>aluminium powder (stabilised) (Number on list 40)<br>Phosphoric acid, C11-14-isoalkyl esters, C13-rich (Number on list 3) |

### 15.2 Chemical safety assessment

## SECTION 16: Other information

**Full text of H-Statements**

| | | |
|---|---|---|
| H228 | : | Flammable solid. |
| H315 | : | Causes skin irritation. |
| H318 | : | Causes serious eye damage. |
| H411 | : | Toxic to aquatic life with long lasting effects. |

**Full text of other abbreviations**

| | | |
|---|---|---|
| Aquatic Chronic | : | Long-term (chronic) aquatic hazard |
| Eye Dam. | : | Serious eye damage |
| Flam. Sol. | : | Flammable solids |
| Skin Irrit. | : | Skin irritation |
| 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 - European 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