

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

STAPA IL HYDROLAN S 408 Aluminium Paste

Version 3.0

Revision Date 12.12.2019

Print Date 06.08.2020

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

1.1 Product identifier

Trade name : STAPA IL HYDROLAN S 408 Aluminium Paste
Material number : 024520GD0

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 :

Telephone :
Telefax :
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 label

Identification	CAS-No.
propan-2-ol	67-63-0
Solvent naphtha (petroleum), light arom.	64742-95-6

SECTION 3: Composition/information on ingredients

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Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
propan-2-ol	67-63-0 200-661-7	Flam. Liq.;2;H225 Acute Tox.;5;H303 Acute Tox.;5;H313 Eye Irrit.;2A;H319 STOT SE;3;H336	25 - 50
aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	25 - 50
silicon dioxide	7631-86-9 231-545-4	Acute Tox.;5;H303	1 - 10
ethanol	64-17-5 200-578-6	Flam. Liq.;2;H225 Eye Irrit.;2A;H319	1 - 10
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	Flam. Liq.;4;H227 Asp. Tox.;1;H304	1 - 10
Solvent naphtha (petroleum), light arom.	64742-95-6	Flam. Liq.;3;H226 Acute Tox.;5;H303 Acute Tox.;5;H313 STOT SE;3;H335, H336 Asp. Tox.;1;H304 Aquatic Chronic;2;H411	1 - 2,5
N-(3-	1760-24-3	Acute Tox.;4;H332	0,25 - 1

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(trimethoxysilyl)propyl)ethylenediamine	217-164-6	Skin Sens.;1;H317 Eye Dam.;1;H318 Aquatic Chronic;2;H411	
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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.
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.

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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.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

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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 protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air

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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)

This information is not available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
propan-2-ol	67-63-0	AGW	200 ppm 500 mg/m ³	2006-01-01	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
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).			
silicon dioxide	7631-86-9	AGW (Inhalable fraction)	4 mg/m ³	2013-09-19	DE TRGS 900

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Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). Colloidal amorphous silica, including pyrogenic silica and in wet processes manufactured silica (precipitated silica, silicagel). When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
ethanol	64-17-5	AGW	500 ppm 960 mg/m ³	2006-01-01	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9	AGW	300 mg/m ³	2017-11-30	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Group exposure limit for hydrocarbon solvent mixtures Commission for dangerous substances See also No. 2.9 of the TRGS 900			
Solvent naphtha (petroleum), light arom.	64742-95-6	AGW	100 mg/m ³	2009-02-16	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Group exposure limit for hydrocarbon solvent mixtures Commission for dangerous substances See also No. 2.9 of the TRGS 900			

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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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concentration of the dangerous substance at the work place.

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

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 : solvent-like
- pH : No data available
- Freezing point : No data available

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Boiling point/boiling range	: 82 °C
Flash point	: 13 °C
Bulk density	: No data available
Flammability (solid, gas)	: The substance or mixture is a flammable solid with the category 1.
Auto-flammability	: not auto-flammable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 1,3 - 2,0 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. Not explosive Vapours may form explosive mixture with air.

9.2 Other information

No data available

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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

Hazardous decomposition products : No data available

Other information : No data available

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SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Components:****propan-2-ol :**

Acute oral toxicity : LD50 Rat: > 2 000 mg/kg

Acute dermal toxicity : LD50 Rabbit: > 2 000 mg/kg

silicon dioxide :

Acute oral toxicity : LD50 Rat: 5 000 mg/kg

Mouse: 15 000 mg/kg

Acute inhalation toxicity : Rat: 0,139 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 Rabbit: > 5 000 mg/kg

ethanol :

Acute oral toxicity : LD50 Mouse: 3 450 mg/kg

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LD50 Rat: 7 060 mg/kg

LD50 Rabbit: 6 300 mg/kg

Acute inhalation toxicity : LC50 Rat: 20 000 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 Rat: > 2 000 mg/kg

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha :

Acute oral toxicity : LD50 Rat: > 5 000 mg/kg

Acute inhalation toxicity : LC50 Rat: Test atmosphere: vapour

An LC50/inhalation/4h/rat could not be determined because
no mortality of rats was observed at the maximum achievable
concentration.

Acute dermal toxicity : LD50 Rabbit: > 5 000 mg/kg

Solvent naphtha (petroleum), light arom. :

Acute oral toxicity : LD50 Rat: 3 492 mg/kg

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Acute dermal toxicity : LD50 Rabbit: > 3 160 mg/kg

N-(3-(trimethoxysilyl)propyl)ethylenediamine :

Acute oral toxicity : LD50 Rat: ca. 2 400 mg/kg

Acute inhalation toxicity : LC50 : 1,49 - 2,44 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 Rat: > 2 000 mg/kg

Skin corrosion/irritation**Product**

May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product**

Eye irritation

Respiratory or skin sensitisation

No data available

Carcinogenicity

No data available

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Toxicity to reproduction/fertility

No data available

Reprod.Tox./Development/Teratogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information**Product**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.,
Concentrations substantially above the TLV value may cause narcotic effects., Solvents may
degrease the skin.

SECTION 12: Ecological information**12.1 Toxicity****Components:****silicon dioxide (7631-86-9) :**

Toxicity to daphnia and other : (Daphnia (water flea)): 7 600 mg/l

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aquatic invertebrates

Toxicity to algae : (Chlorella pyrenoidosa (aglae)): 440 mg/l
Exposure time: 72 h

Solvent naphtha (petroleum), light arom. (64742-95-6) :

Ecotoxicology Assessment

Long-term (chronic) aquatic hazard : 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

No data available

12.6 Other adverse effects

Product:

Additional ecological information : No data available

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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.

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(Aluminum 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

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

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Labels : 4.1
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

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Prohibition/Restriction

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

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.
H226	: Flammable liquid and vapour.
H227	: Combustible liquid.
H228	: Flammable solid.
H303	: May be harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H313	: May be harmful in contact with skin.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H411	: Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a

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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.