STAPA IL HYDROLAN S 408 Aluminium Paste

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6.1	28.02.2024	102000031268	Date of first issue: 20.02.2019

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

Product code : 024520GD0

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)

Flammable solids, Category 1	H228: Flammable solid.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

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.
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:

propan-2-ol
Solvent naphtha (petroleum), light arom.

Additional Labelling

EUH208 Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.

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	ClassificationREGULATION (EC) No 1272/2008	Concentration (% w/w)

propan-2-ol	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system)	>= 25 - < 50
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1 01-2119529243-45	Flam. Sol. 1; H228	>= 25 - < 50
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 1 - < 10
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9 918-481-9	Asp. Tox. 1; H304 EUH066	>= 1 - < 10
Solvent naphtha (petroleum), light arom.	64742-95-6 918-668-5	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 1 - < 2.5
N-(3-(trimethoxysilyl)propyl)ethylenediamine	1760-24-3 217-164-6 01-2119970215-39	Eye Dam. 1; H318 Skin Sens. 1B; H317 STOT SE 3; H335 (Respiratory system)	>= 0.1 - < 1

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 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.

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 : 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, 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 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
propan-2-ol	67-63-0	TWA	400 ppm 999 mg/m3	GB EH40
		STEL	500 ppm 1,250 mg/m3	GB EH40
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.			
silicon dioxide	7631-86-9	TWA (inhalable dust)	6 mg/m3 (Silica)	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)	2.4 mg/m3 (Silica)	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.			
ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m3	GB EH40
	Further information: 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
propan-2-ol	Workers	Inhalation	Long-term systemic effects	500 mg/m3
	Workers	Dermal	Long-term systemic	888 mg/kg

			effects	
	Consumers	Inhalation	Long-term systemic effects	89 mg/m3
	Consumers	Dermal	Long-term systemic effects	319 mg/kg
	Consumers	Oral	Long-term systemic effects	26 mg/kg
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
silicon dioxide	Workers	Inhalation	Long-term systemic effects	4 mg/m3
ethanol	Workers	Inhalation	Long-term systemic effects	950 mg/m3
	Workers	Inhalation	Long-term local effects	1900 mg/m3
	Workers	Dermal	Long-term systemic effects	343 mg/kg
	Consumers	Inhalation	Long-term systemic effects	114 mg/m3
	Consumers	Dermal	Long-term systemic effects	206 mg/kg
	Consumers	Oral	Long-term systemic effects	87 mg/kg
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	Workers	Inhalation	Acute systemic effects	1500 mg/m3
	Workers	Dermal	Long-term systemic effects	300 mg/kg
	Consumers	Oral	Long-term systemic effects	300 mg/kg
	Consumers	Dermal	Long-term systemic effects	300 mg/kg
	Consumers	Inhalation	Long-term systemic effects	900 mg/m3
Solvent naphtha (petroleum), light arom.	Workers	Inhalation	Long-term systemic effects	151 mg/m3
	Workers	Inhalation	Acute systemic effects	1286.4 mg/m3
	Workers	Inhalation	Long-term local effects	837.5 mg/m3
	Workers	Inhalation	Acute local effects	1066.67 mg/m3
	Workers	Dermal	Long-term systemic effects	12.5 mg/kg

	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Inhalation	Acute systemic effects	1152 mg/m3
	Consumers	Inhalation	Long-term local effects	178.57 mg/m3
	Consumers	Inhalation	Acute local effects	640 mg/m3
	Consumers	Dermal	Long-term systemic effects	7.5 mg/kg
	Consumers	Oral	Long-term systemic effects	7.5 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Workers	Inhalation	Long-term systemic effects	35.3 mg/m3
	Workers	Inhalation	Acute systemic effects	260 mg/m3
	Workers	Inhalation	Acute local effects	5.36 mg/m3
	Workers	Dermal	Long-term systemic effects	5 mg/kg
	Workers	Dermal	Acute systemic effects	5 mg/kg
	Consumers	Inhalation	Long-term systemic effects	8.7 mg/m3
	Consumers	Inhalation	Long-term local effects	0.1 mg/m3
	Consumers	Inhalation	Acute systemic effects	50 mg/m3
	Consumers	Inhalation	Acute local effects	4 mg/m3
	Consumers	Dermal	Long-term systemic effects	2.5 mg/kg
	Consumers	Dermal	Acute systemic effects	17 mg/kg
	Consumers	Oral	Long-term systemic effects	2.5 mg/kg

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

Substance name	Environmental Compartment	Value
propan-2-ol	Fresh water	140.9 mg/l
	Marine water	140.9 mg/l
	Fresh water sediment	552 mg/kg
	Marine sediment	552 mg/kg
	STP	2251 mg/l
	Soil	28 mg/kg
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l
ethanol	Fresh water	0.96 mg/l
	Marine water	0.79 mg/l
	Intermittent water release	2.75 mg/l
	STP	580 mg/l
	Fresh water sediment	3.6 mg/kg
	Marine sediment	2.9 mg/kg

	Soil	0.63 mg/kg
	Secondary Poisoning	380 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Fresh water	0.062 mg/l
	Marine water	0.0062 mg/l
	STP	25 mg/l
	Fresh water sediment	0.048 mg/kg
	Marine sediment	0.0048 mg/kg
	Soil	0.0075 mg/kg

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : Pasty solid

Colour : silver

Odour : solvent-like

Odour Threshold	:	No data available
Freezing point	:	No data available
Boiling point/boiling range	:	82 - 83 °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	:	13 °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

9.2 Other information

Explosives	:	Not explosive Vapours may form explosive mixture with air. Not explosive Vapours may form explosive mixture with air.
Self-ignition	:	not auto-flammable

Miscibility with water : partly miscible

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.

Components:

propan-2-ol:

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

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

aluminium powder (stabilised):

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

ethanol:

Acute oral toxicity : LD50 (Rat, male and female): 10,470 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): 124.7 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

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
Remarks: 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

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

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

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

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation in susceptible persons.

Components:

ethanol:

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

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

Result : Repeated exposure may cause skin dryness or cracking.

Solvent naphtha (petroleum), light arom.:
Result : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation
Causes serious eye irritation.

Product:
Remarks : Eye irritation

Components:

propan-2-ol:
Result : Eye irritation

ethanol:
Result : Eye irritation
Remarks : Based on available data, the classification criteria are not met.

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

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Components:

N-(3-(trimethoxysilyl)propyl)ethylenediamine:
Result : The product is a skin sensitiser, sub-category 1B.

Germ cell mutagenicity
Not classified based on available information.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:
Germ cell mutagenicity-Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Solvent naphtha (petroleum), light arom.:
Germ cell mutagenicity-Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Carcinogenicity
Not classified based on available information.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:
Carcinogenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Solvent naphtha (petroleum), light arom.:
Carcinogenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
May cause drowsiness or dizziness.

Components:

propan-2-ol:
Assessment : May cause drowsiness or dizziness.

Solvent naphtha (petroleum), light arom.:
Assessment : May cause respiratory irritation., May cause drowsiness or dizziness.

N-(3-(trimethoxysilyl)propyl)ethylenediamine:
Assessment : May cause respiratory irritation.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:
May be fatal if swallowed and enters airways.

Solvent naphtha (petroleum), light arom.:
May be fatal if swallowed and enters airways.

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:

Solvent naphtha (petroleum), light arom.:

Ecotoxicology Assessment

Chronic aquatic toxicity : 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 information : No data available

Components:

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

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
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

IATA (Cargo)

Packing instruction (cargo aircraft)	:	448
Packing instruction (LQ)	:	Y441
Packing group	:	II
Labels	:	4.1

IATA (Passenger)

Packing instruction (passenger aircraft)	:	445
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.

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,	:	Conditions of restriction for the following entries should be

mixtures and articles (Annex XVII)		considered: propan-2-ol (Number on list 3) aluminium powder (stabilised) (Number on list 40) ethanol (Number on list 3) Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha (Number on list 3) Solvent naphtha (petroleum), light arom. (Number on list 3) N-(3-(trimethoxysilyl)propyl)ethylenediamine (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

H225	:	Highly flammable liquid and vapour.
H226	:	Flammable liquid and vapour.
H228	:	Flammable solid.
H304	:	May be fatal if swallowed and enters airways.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H411	:	Toxic to aquatic life with long lasting effects.
EUH066	:	Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Flam. Sol.	:	Flammable solids
Skin Sens.	:	Skin sensitisation
STOT SE	:	Specific target organ toxicity - single exposure

GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
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; 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

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