SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878

STAPA 4 ZnAl7 Zinc Paste

Version	Revision Date:	SDS Number:	Print Date: 26.02.2026
3.1	25.02.2026	102000021410	Date of first issue: 16.04.2014

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

1.1 Product identifier

Trade name : STAPA 4 ZnAl7 Zinc Paste

Product code : 032037K40

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

Use of the Substance/Mixture : Coloring agents, pigments

1.3 Details of the supplier of the safety data sheet

Company : ECKART Suisse SA
Route de la Brasserie 2
1963 Vétroz

Telephone : +410273454800

Telefax : +410273454859

E-mail address of person responsible for the SDS : msds.eckart@altana.com

1.4 Emergency telephone

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)

Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:		
Signal Word	:	Warning	
Hazard Statements	:	H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	:	**Prevention:**	
		P273	Avoid release to the environment.
		Response:	
		P391	Collect spillage.
		Disposal:	
		P501	Dispose of contents/ container to an approved waste disposal plant.

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)
zinc powder — zinc dust (stabilised)	7440-66-6 231-175-3 030-001-01-9 01-2119467174-37	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Aquatic Acute --- M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 50 - <= 100
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	64742-48-9 918-481-9	Asp. Tox. 1; H304 EUH066	>= 1 - < 10
aluminium powder (stabilised)	7429-90-5	Flam. Sol. 1; H228	>= 1 - < 10

	231-072-3 013-002-00-1 01-2119529243-45	Note T	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : Take the victim into fresh air.
Remove from exposure, lie down.
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.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

Flush eyes with water as a precaution.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

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 : Carbon dioxide (CO2)
Water

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : Contact with water liberates extremely flammable gas (hydrogen).

Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.
Ensure adequate ventilation.
Avoid dust formation.

6.2 Environmental precautions

General advice : Do not flush into surface water.
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.

Pick up and transfer to properly labeled containers.
Do not flush with water.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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	:	Avoid creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Advice on protection against fire and explosion	:	Keep away from heat and sources of ignition. No smoking. Normal measures for preventive fire protection.
Hygiene measures	:	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	:	Earthing of containers and apparatuses is essential. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Store in original container. Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - 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.
Advice on common storage	:	Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not store together with oxidizing and self-igniting products.
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

zinc powder — zinc dust (stabilised)	7440-66-6	TWA (Inhalable)	10 mg/m3	GB EH40
		TWA (Respirable fraction)	4 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			

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

Substance name	End Use	Routes of exposure	Potential health effects	Value
zinc powder — zinc dust (stabilised)	Workers	Inhalation	Long-term systemic effects	5 mg/m3
	Workers	Dermal	Long-term systemic effects	83 mg/kg
	Consumers	Inhalation	Long-term systemic effects	2.5 mg/m3
	Consumers	Dermal	Long-term systemic effects	83 mg/kg
	Consumers	Oral	Long-term systemic effects	0.83 mg/kg
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	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
	Consumers	Inhalation	Long-term systemic effects	0.41 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
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

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

Substance name	Environmental Compartment	Value
zinc powder — zinc dust (stabilised)	Fresh water	0.0206 mg/l

	Sea water	0.0061 mg/l
	STP	0.100 mg/l
	Fresh water sediment	235.6 mg/kg
	Sea sediment	121 mg/kg
	Soil	35.6 mg/kg
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses

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 : 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.
In the case of dust or aerosol formation use respirator with an approved filter.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : Pasty solid

Color : silver

Odor : characteristic

Odor Threshold : No data available

Freezing point : No data available

Boiling point/boiling range	:	200 °C
Flammability	:	Combustible Solids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	65 °C
Autoignition 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
Vapor pressure	:	No data available
Vapor Pressure for Components:		
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	:	0.05 kPa (20 °C)
Relative density	:	No data available
Density	:	6.0 - 7.0 g/cm3
Relative vapor density	:	No data available
Particle characteristics		
Particle Size Distribution	:	1 - 15 µm

9.2 Other information

Flammable solids		
Burning number	:	1
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

Components:

zinc powder — zinc dust (stabilised):

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

Acute inhalation toxicity :
LC50 (Rat): 5.41 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

aluminium powder (stabilised):
Acute inhalation toxicity :

11.2 Information on other hazards

Further information

Product:
Remarks : No data available

Components:

zinc powder — zinc dust (stabilised):
Remarks : No data available

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:
Remarks : Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

zinc powder — zinc dust (stabilised):
M-Factor (Short-term (acute) aquatic hazard) : 1
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.

Components:

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

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

Components:

zinc powder — zinc dust (stabilised):

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.

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

Additional ecological information : No data available

SECTION 13: Disposal considerations

European Waste Catalog : 10 05 04 - Zinc thermal metallurgy waste, other particles and dust

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
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. In accordance with local and national regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 3077
IMDG	:	UN 3077
IATA	:	UN 3077

14.2 UN proper shipping name

ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder, stabilized)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc powder, stabilized)
IATA	:	Environmentally hazardous substance, solid, n.o.s. (Zinc powder, stabilized)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADR	:	9	
IMDG	:	9	
IATA	:	9	

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	M7
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)

IMDG

Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Remarks	:	IMDG Code segregation group 7 - Heavy metals and their salts

IATA (Cargo)

Packing instruction (cargo aircraft)	:	956
Packing instruction (LQ)	:	Y956
Packing group	:	III
Labels	:	9

IATA (Passenger)

Packing instruction (passenger aircraft)	:	956
Packing instruction (LQ)	:	Y956
Packing group	:	III
Labels	:	9

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

14.6 Special precautions for user

Remarks : For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

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)	:	Banned and/or restricted
Regulation (EU) No 2024/590 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.
H304	:	May be fatal if swallowed and enters airways.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
EUH066	:	Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Flam. Sol.	:	Flammable solids
Note T	:	This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3.
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 Standardization; 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 Organization 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, Authorization 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:**
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	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