according to Regulation (EC) No. 1907/2006



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

1.1 Product identifier

Trade name STAPA 304 Copper Paste

Product code 073221B60

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

E-mail address of person responsible for the SDS

msds.eckart@altana.com

1.4 Emergency telephone number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 H302: Harmful if swallowed.

Acute toxicity, Category 3 H331: Toxic if inhaled.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Short-term (acute) aquatic hazard,

Category 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, H410: Very toxic to aquatic life with long lasting

Category 1 effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word Danger

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Hazard statements : H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H410 Very toxic to aquatic life with long lasting

effects.

Precautionary statements : **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/

vapours/ spray.

P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

Response:

P304 + P340 + P311 IF INHALED: Remove person to fresh

air and keep comfortable for breathing. Call

a POISON CENTER/doctor.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Storage:

P403 + P233 Store in a well-ventilated place. Keep

container tightly closed.

Hazardous components which must be listed on the label: copper flakes (coated with aliphatic acid)

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. EC-No. Index-No. Registration number	Classification REGULATION (EC) No 1272/2008	Concentration (% w/w)
copper flakes (coated with aliphatic acid)	Not Assigned	Acute Tox. 4; H302 Acute Tox. 3; H331 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 50 - <= 100
Naphtha (petroleum), hydrotreated heavy; Low boiling	64742-48-9 918-481-9	Asp. Tox. 1; H304	>= 10 - < 20
point ydrogen treated naphtha	01-2119457273-39		

For explanation of abbreviations see section 16.

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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 : 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.

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

Risks : Harmful if swallowed.

Causes serious eye irritation.

Toxic if inhaled.

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 : Special powder against metal fire

Dry sand ABC powder

Unsuitable extinguishing

Water

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

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

courses.

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5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

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.

Use personal protective equipment.

Avoid dust formation.

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 material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Pick up and transfer to properly labelled 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).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust. Avoid contact with skin and eyes. 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.

Avoid dust formation.

Hygiene measures : General industrial hygiene practice.

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

Keep away from sources of ignition - No smoking. Do not store near combustible materials. Keep containers tightly closed in a cool, well-ventilated place. To maintain product

quality, do not store in heat or direct sunlight.

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.

Dampness : Keep in a dry, cool and well-ventilated place.

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

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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
copper flakes (coated with aliphatic acid)	Not Assigned	TWA (Fumes)	0.2 mg/m3 (Copper)	GB EH40
		TWA (Dusts and mists)	1 mg/m3 (Copper)	GB EH40
		STEL (Dusts and mists)	2 mg/m3 (Copper)	GB EH40

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha	Workers	Skin contact	Long-term systemic effects	300 mg/kg
	Consumers	Ingestion	Long-term systemic effects	300 mg/kg
	Consumers	Skin contact	Long-term systemic effects	300 mg/kg
	Consumers	Inhalation	Long-term systemic effects	900 mg/m3

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

Substance name	Environmental Compartment	Value
copper flakes (coated with aliphatic acid)	Soil	65.5 mg/kg
	Fresh water	0.0078 mg/l
	Fresh water sediment	87 mg/kg
	Marine water	0.0052 mg/l
	Marine sediment	676 mg/kg
	STP	0.230 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

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

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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.

Equipment should conform to EN 14387

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 : copper

Odour : characteristic

Odour Threshold : No data available

pH : No data available

Freezing point : No data available

Boiling point/boiling range : 180 °C

Flash point : 36 °C

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

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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 : No data available

Bulk density : No data available

Solubility(ies)

Water solubility : immiscible

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

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Hazardous reactions : Stable under recommended storage conditions.

No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Do not allow evaporation to dryness.

No data available

10.5 Incompatible materials

10.6 Hazardous decomposition products

Thermal decomposition : Carbon monoxide, carbon dioxide and unburned

hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed. Toxic if inhaled.

Product:

Acute oral toxicity : Acute toxicity estimate: 557.41 mg/kg

Method: Calculation method

Components:

copper flakes (coated with aliphatic acid):

Acute oral toxicity : LD50 Oral (Rat, male and female): 300 - 500 mg/kg

Method: OECD Test Guideline 423

Assessment: The component/mixture is moderately toxic after

single ingestion.

Acute inhalation toxicity : LC50 (Rat, male): 0.7 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

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

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

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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

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Eye irritation

Components:

copper flakes (coated with aliphatic acid):

Result: Eye irritation

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.

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Further information

Product:

Remarks: No data available

Components:

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

Remarks: Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

copper flakes (coated with aliphatic acid):

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

aquatic hazard)

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

Very toxic to aquatic life.

Long-term (chronic) aquatic

hazard

: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

12.6 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.

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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 : 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

 ADR
 : UN 3077

 IMDG
 : UN 3077

 IATA
 : UN 3077

14.2 UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Copper metal powder)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Copper metal powder)

IATA : Environmentally hazardous substance, solid, n.o.s.

(Copper metal powder)

14.3 Transport hazard class(es)

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 ADR
 : 9

 IMDG
 : 9

 IATA
 : 9

14.4 Packing group

ADR

Packing group : III
Classification Code : M7
Hazard Identification Number : 90
Labels : 9

IMDG

Packing group : III Labels : 9

EmS Code : F-A, S-F

Remarks : IMDG Code segregation group 7 - Heavy metals and their

salts

956

IATA (Cargo)

Packing instruction (cargo

aircraft)

Packing instruction (LQ) : Y956
Packing group : III

Labels : Class 9 - Miscellaneous dangerous substances and articles

IATA (Passenger)

Packing instruction : 956

(passenger aircraft)

Packing instruction (LQ) : Y956 Packing group : III

Labels : Class 9 - Miscellaneous dangerous substances and articles

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : 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.

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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 : Not applicable

Concern for Authorisation (Article 59).

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.

H319 : Causes serious eye irritation.

H331 : Toxic if inhaled.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard
Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard Eye Irrit. : Eye irritation

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 - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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

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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; 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.

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