according to Regulation (EC) No. 1907/2006



METALSTAR UV/LED FPG 726 873 LITHO INK

| Version | Revision Date: | SDS Number: | Print Date: 13.07.2023 |
|---------|----------------|--------------|---------------------------------|
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1 Product identifier | | |
|------------------------|---|--|
| Trade name | : | METALSTAR UV/LED FPG 726 873 LITHO INK |
| Product code | : | 025880N20 |

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

| Use of the | : | Colorant; Printing ink related material; Printing ink, Colouring |
|-------------------|---|--|
| Substance/Mixture | | agents, dyes |

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 | <u>m</u> |

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)

Acute toxicity, Category 4 Eye irritation, Category 2 Skin sensitisation, Category 1 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 1 H302: Harmful if swallowed.H319: Causes serious eye irritation.H317: May cause an allergic skin reaction.H400: Very toxic to aquatic life.

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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| Hazar | d pictograms | : | | |
| Signa | l word | : | Warning | |
| Hazar | d statements | : | H302 H317 H319 H410 | Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects. |
| Preca | utionary statements | : | Prevention: P261 P264 P273 P280 | Avoid breathing mist or vapours. Wash skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/ eye protection/ face protection. |
| | | | Response: P333 + P313 | If skin irritation or rash occurs: Get medical |
| | | | P391 | advice/ attention. Collect spillage. |

Hazardous components which must be listed on the label:

Copper

Glycerol, propoxylated, esters with acrylic acid Propylidynetrimethanol, ethoxylated, esters with acrylic acid 2,6-bis(1,1-dimethylethyl)-4-(phenylenemethylene)cyclohexa-2,5-dien-1-one

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

| oomponenta | | | |
|---------------|---------------------|---------------------|---------------|
| Chemical name | CAS-No. | ClassificationREGUL | Concentration |
| | EC-No. | ATION (EC) No | (% w/w) |
| | Index-No. | 1272/2008 | |
| | Registration number | | |
| Copper | 7440-50-8 | Acute Tox. 4; H302 | >= 25 - < 50 |
| | | Eye Irrit. 2; H319 | |
| | 231-159-6 | Aquatic Acute 1; | |
| | 01-2119480154-42 | H400 | |
| | | Aquatic Chronic 1; | |
| | | H410 | |
| | | | |

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|-----------------------------------|--|--|--|--------------|
| | | | M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 | |
| | rol, propoxylated, esters crylic acid | 52408-84-1 500-114-5 01-2119487948-12 | Eye Irrit. 2; H319 Skin Sens. 1; H317 | >= 10 - < 2 |
| | lidynetrimethanol, ylated, esters with acrylic | 28961-43-5 500-066-5 01-2119489900-30 | Eye Irrit. 2; H319 Skin Sens. 1; H317 | >= 1 - < 1 |
| zinc p (stabil | owder — zinc dust ised) | 7440-66-6 231-175-3 030-001-01-9 01-2119467174-37 | Aquatic Acute 1; H400 Aquatic Chronic 1; H410 | >= 2.5 - < |
| hydro 1-yl)o bis(hy | oxy-1,2-ethanediyl), .alpha omega[(1-oxo-2-propen- xy]-, ether with 2,2- droxymethyl)-1,3- nediol (4:1) | 51728-26-8 500-111-9 01-2119969962-19 | Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411 | >= 2.5 - < 1 |
| Benze with 2 Benze methy | ene, ethenyl-, copolymer ,5-Furandione and ene, 1,1'-(1,1-dimethyl-3- rlene-1,3-propanediyl)bis-,rp. Dxirane | Not Assigned 941-326-1 | Aquatic Acute 1; H400 | >= 0.1 - < 0 |
| (phen | s(1,1-dimethylethyl)-4- ylenemethylene)cyclohexa- en-1-one | 7078-98-0 429-460-4 606-117-00-9 | Skin Sens. 1; H317 Aquatic Chronic 4; H413 | >= 0.1 - < 0 |

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. Do not leave the victim unattended. |
| If inhaled | Remove to fresh air. 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. |

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| In cas | e of eye contact | If on clothes, re : Immediately flu Remove contac | sh eye(s) with plenty of water. ct lenses. |
| If swallowed | | If eye irritation | open while rinsing. persists, consult a specialist. g immediately and call a physician. |
| | | Do not give mill Never give any | k or alcoholic beverages. thing by mouth to an unconscious person. rsist, call a physician. |
| 4.2 Most ii | nportant symptoms | and effects, both acu | ute and delayed |
| Risks | | : Harmful if swall May cause an a Causes serious | allergic skin reaction. |

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 media | : | Water High volume water jet Carbon dioxide (CO2) |

5.2 Special hazards arising from the substance or mixture

| Specific hazards during | : | Do not allow run-off from fire fighting to enter drains or water |
|-------------------------|---|--|
| firefighting | | courses. |

5.3 Advice for firefighters

| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |
|--|---|---|
| Further information | : | Standard procedure for chemical fires. |
| | | 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. |

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Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

| 6.1 Personal precautions, protect | ctive | equipment and emergency procedures |
|-----------------------------------|-------|--|
| Personal precautions | : | Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. |
| 6.2 Environmental precautions | | |
| Environmental precautions | : | 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. |
|-------------------------|---|---|
| | | 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). |
| | | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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

| 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 |
| |

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| application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Advice on protection against fire and explosion : Keep away from heat and sources of ignition. No smoking. 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 containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. Further information on storage : 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 ade self-igniting products | Vers 4.0 | sion | Revision Date: 11.07.2023 | | DS Number: 2000032634 | Print Date: 13.07.2023 Date of first issue: 24.02.2020 | | |
|---|-------------|------------------|------------------------------|---|---|---|--|--|
| 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 | | | : | Dispose of rinse regulations. Persons suscepti allergies, chronic be employed in a used. | ble to skin sensitisation problems or asthma, or recurrent respiratory disease should not ny process in which this mixture is being | | | |
| 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 areas and containersincluding any incompatibilities: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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 | | | | | Normal measures | s for preventive fire protection. | | |
| 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. Further information on storage Protect from humidity and water. 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 | | Hygiene measures | | : | When using do not eat or drink. When using do not smoke. | | | |
| areas and containersstore 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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.Further information on storage conditions:Protect from humidity and water.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 | 7.2 | Conditi | ons for safe storage, | including any incompatibilities | | | | |
| place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 | | | | : | store near combu closed in a cool, | ustible materials. Keep containers tightly well-ventilated place. To maintain product | | |
| storage conditions 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 | | | | | place. Containers resealed and kep installations / wo | s which are opened must be carefully of upright to prevent leakage. Electrical rking materials must comply with the | | |
| strongly acid materials in order to avoid exothermic reactions Do not store together with oxidizing and self-igniting products | | | | : | Protect from hum | nidity and water. | | |
| | | Advice | on common storage | : | strongly acid mat | erials in order to avoid exothermic reactions. | | |
| Dampness : Keep in a dry, cool and well-ventilated place. | | Dampn | iess | : | Keep in a dry, co | ol and well-ventilated place. | | |
| Further information on : No decomposition if stored and applied as directed. storage stability 7.3 Specific end use(s) | | storage | e stability | : | No decomposition | n 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

| Componen | ts | CAS-No. | Value type (Form of exposure) | Control parameters | Basis |
|----------|----|-----------|-------------------------------|-----------------------|---------|
| Copper | | 7440-50-8 | TWA (Fumes) | 0.2 mg/m3 (Copper) | GB EH40 |

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|---|---------------|----------------|--------------------|------|-------------------------------|------------|
| | | TWA mists) | (Dusts and | | ng/m3 opper) | GB EH40 |
| | | STEL mists) | (Dusts and | | ng/m3 opper) | GB EH40 |
| zinc powder — zinc dust (stabilised) | 7440-66-6 | TWA | (Inhalable) | 10 | mg/m3 | GB EH40 |
| | | TWA fractio | (Respirable on) | 4 n | ng/m3 | GB EH40 |
| Derived No Effect L | evel (DNEL) a | accordir | ng to Regula | tion | (EC) No. 1907/2006: | |
| Substance name | End Use | I | Exposure rou | ites | Potential health effects | Value |
| Copper | Workers | | Skin contact | | Long-term systemic effects | 137 mg/kg |
| | Workers | | Skin contact | | Acute systemic effects | 273 mg/kg |
| | Workers | | Inhalation | | Long-term systemic effects | 20 mg/m3 |
| | Consumer | | nhalation | | Long-term local effects | 1 mg/m3 |
| | Consumer | | nhalation | | Acute local effects | 1 mg/m3 |
| | Consumer | | Skin contact | | Long-term systemic effects | 137 mg/kg |
| | Consumer | | Skin contact | | Acute systemic effects | 273 mg/kg |
| | Consumer | | ngestion | | Long-term systemic effects | 0.041 mg/k |
| Glycerol, propoxylated, esters with acrylic acid | Workers | | nhalation | | Long-term systemic effects | 16.22 mg/m |
| | Workers | I | Dermal | | Long-term systemic effects | 1.92 mg/kg |
| | Consumer | | nhalation | | Long-term systemic effects | 4.87 mg/m3 |
| | Consumer | | Dermal | | Long-term systemic effects | 1.15 mg/kg |
| | Consumer | | Oral | | Long-term systemic effects | 1.39 mg/kg |
| Propylidynetrimethan ol, ethoxylated, ester with acrylic acid | | | nhalation | | Long-term systemic effects | 16.2 mg/m3 |
| | Workers | | Skin contact | | Long-term systemic effects | 0.8 mg/kg |
| | Consumer | | Inhalation | | Long-term systemic effects | 4.9 mg/m3 |
| | Consumer | rs | Skin contact | | Long-term systemic effects | 0.48 mg/kg |
| | Consumer | rs (| Oral | | Long-term systemic effects | 1.39 mg/kg |

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| dust (stabilised) | | | effects | |
|---|-----------|--------------|-------------------------------|------------|
| | Workers | Skin contact | Long-term systemic effects | 83 mg/kg |
| | Consumers | Inhalation | Long-term systemic effects | 2.5 mg/m3 |
| | Consumers | Skin contact | Long-term systemic effects | 83 mg/kg |
| | Consumers | Ingestion | Long-term systemic effects | 0.83 mg/kg |
| Poly(oxy-1,2- ethanediyl), .alpha hydroomega[(1- oxo-2-propen-1- yl)oxy]-, ether with 2,2- bis(hydroxymethyl)- 1,3-propanediol (4:1) | Workers | Inhalation | Long-term systemic effects | 0.88 mg/m3 |
| | Workers | Dermal | Long-term systemic effects | 0.5 mg/kg |

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

| Substance name | Environmental Compartment | Value |
|---|----------------------------|---------------|
| Copper | Fresh water | 0.0078 mg/l |
| | Marine water | 0.0052 mg/l |
| | STP | 0.230 mg/l |
| | Fresh water sediment | 87 mg/kg |
| | Marine sediment | 676 mg/kg |
| | Soil | 65 mg/kg |
| Glycerol, propoxylated, esters with acrylic acid | Fresh water | 0.0057 mg/l |
| | Marine water | 0.0005 mg/l |
| | Fresh water sediment | 0.0169 mg/kg |
| | Marine sediment | 0.0017 mg/kg |
| | STP | 10 mg/l |
| | Soil | 0.0011 mg/kg |
| Propylidynetrimethanol, ethoxylated, esters with acrylic acid | Soil | 0.00644 mg/kg |
| | Fresh water | 0.00195 mg/l |
| | Fresh water sediment | 0.038 mg/kg |
| | STP | 10 mg/l |
| | Marine water | 0.000195 mg/l |
| | Marine sediment | 0.0038 mg/kg |
| | Intermittent Release | 0.00195 mg/l |
| | Intermittent water release | 0.0195 mg/l |
| zinc powder — zinc dust (stabilised) | Fresh water | 0.0206 mg/l |
| | Marine water | 0.0061 mg/l |
| | STP | 0.100 mg/l |
| | Fresh water sediment | 235.6 mg/kg |
| | Marine sediment | 121 mg/kg |

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4 mg/l

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| hydro 1-yl)o bis(hy | oxy-1,2-ethanediyl), .a oomega[(1-oxo-2-pr oxy]-, ether with 2,2- ydroxymethyl)-1,3- anediol (4:1) | Soil Soil | | 35.6 mg/kg 0.0078 mg/kg |
| | • • | Fresh water | | 0.00176 mg/l |
| | | Fresh water se | diment | 0.017 mg/kg |
| | | Marine water | | 0.000176 mg/l |
| | | Marine sedime | nt | 0.0017 mg/kg |
| | | | | |

STP

8.2 Exposure controls

| Hand protection | Safety glasses Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems. 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 Respiratory protection | Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place. Use suitable breathing protection if workplace concentration |
| | requires. Equipment should conform to EN 14387 |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Physical state | : liquid |
|----------------|----------|
| Colour | : gold |

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|----------------|---|---|--------------------------------|---|
| | | | | |
| Odou | Ir | : | characteristic | |
| Odou | r Threshold | : | No data available | 9 |
| Meltir | ng point/range | : | Not applicable | |
| Boilin | g point/boiling range | : | > 100 °C | |
| Flam | mability | : | No data available | 9 |
| | r explosion limit / Upper nability limit | : | No data available | 9 |
| | r explosion limit / Lower nability limit | : | No data available | 9 |
| Flash | point | : | > 100 °C | |
| Auto- | ignition temperature | : | Not relevant | |
| Deco | mposition temperature | : | No data available | 9 |
| рН | | : | substance/mixtur | re is non-soluble (in water) |
| Vi | scosity, kinematic | : | No data available | 2 |
| W | bility(ies) ater solubility blubility in other solvents | | insoluble No data available | 9 |
| | ion coefficient: n- ol/water | : | No data available | 9 |
| | ur pressure | : | No data available | 9 |
| Relat | ive density | : | No data available | 9 |
| Dens | ity | : | 1.4 g/cm3 | |
| Relat | ive vapour density | : | No data available | 9 |
| Pa | article Size Distribution | : | No data available | 9 |
| | information | | | |

No data available

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| SECTION | N 10: Stability and | reactivity | |
| 10.1 Read No de | stivity ecomposition if stored | and applied as directed | ed. |
| | nical stability ecomposition if stored | and applied as directed | ed. |
| 10.3 Poss | sibility of hazardous | reactions | |
| Haza | rdous reactions | : Stable under | recommended storage conditions. |
| | | No decompos | sition if stored and applied as directed. |
| 10.4 Cond | ditions to avoid | | |
| Cond | litions to avoid | : Do not allow | evaporation to dryness. |
| | | No data avail | able |
| 10.5 Incoi | mpatible materials | | |
| 10.6 Haza | rdous decompositio | n products | |
| Therr | mal decomposition | : Carbon mono hydrocarbons | xide, carbon dioxide and unburned s (smoke). |
| SECTION | N 11: Toxicological | information | |
| 11.1 Infor | mation on hazard cla | asses as defined in F | Regulation (EC) No 1272/2008 |
| | e toxicity | | |
| Harm | ful if swallowed. | | |
| Prod | uct: | | |

| Product: Acute oral toxicity | : | Acute toxicity estimate: 1,561 mg/kg Method: Calculation method |
|---------------------------------------|-----|---|
| Components: | | |
| Copper: Acute oral toxicity | : | Assessment: The component/mixture is moderately toxic after single ingestion. |
| zinc powder — zinc dust (sta | abi | lised): |
| 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 |

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| | | | |
| | corrosion/irritation | ilable information | |
| | lassified based on ava | liable information. | |
| Produ Rema | | : May cause sk | kin irritation and/or dermatitis. |
| | | , | |
| <u>Com</u> | oonents: | | |
| Сорр | | | |
| Rema | arks | : May cause sk | kin irritation in susceptible persons. |
| Serio | us eye damage/eye i | rritation | |
| Cause | es serious eye irritatio | n. | |
| Prod | | | |
| Rema | arks | : May cause irr | eversible eye damage. |
| <u>Com</u> | oonents: | | |
| Сорр | er: | | |
| Resu | lt | : Eye irritation | |
| Glyce | erol, propoxylated, e | sters with acrylic ac | cid: |
| Resu | lt | : Eye irritation | |
| Prop | ylidynetrimethanol, e | thoxylated. esters | with acrylic acid: |
| Resu | | : Irritating to ey | - |
| Resn | iratory or skin sensi | isation | |
| - | sensitisation | | |
| | cause an allergic skin | reaction. | |
| - | iratory sensitisation | | |
| Not cl | lassified based on ava | ilable information. | |
| Prod | | | |
| Rema | arks | : Causes sensi | itisation. |
| <u>Com</u> | oonents: | | |
| Glyce | erol, propoxylated, e | sters with acrylic ac | cid: |
| Resu | lt | : May cause se | ensitisation by skin contact. |
| Prop | ylidynetrimethanol, e | thoxylated esters | with acrylic acid: |
| Resul | | - | ensitisation by skin contact. |



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|----------------|---|--|---|
| Rema | arks | : Causes sensitis May cause sen contact. | sation. sitisation of susceptible persons by skin |
| | cell mutagenicity | | |
| | lassified based on ava | allable information. | |
| | nogenicity | lable information | |
| | lassified based on ava | allable information. | |
| - | oductive toxicity lassified based on ava | alable information | |
| | | | |
| | F - single exposure lassified based on ava | ailable information | |
| | - repeated exposure | | |
| | lassified based on ava | | |
| Aspir | ation toxicity | | |
| Not c | lassified based on ava | ailable information. | |
| 11.2 Infor | mation on other haza | ards | |
| Furth | er information | | |
| Prod | uct: | | |
| Rema | arks | : No data availat | le |
| Com | ponents: | | |
| Сорр | er: | | |
| Rema | arks | : No data availat | le |
| zinc | powder — zinc dust | (stabilised): | |
| | arks | : No data availat | |

12.1 Toxicity

Components:

| Copper: | | |
|------------------------------|---|----|
| M-Factor (Short-term (acute) | : | 10 |
| aquatic hazard) | | |
| M-Factor (Long-term | : | 10 |
| (chronic) aquatic hazard) | | |

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| Ecot | oxicology Assessmen | t | | |
| | e aquatic toxicity | | Very toxic to ac | quatic life. |
| | nic aquatic toxicity | | | , uatic life with long lasting effects. |
| Child | | • | | qualic life with long lasting enects. |
| zinc | powder — zinc dust (s | stabi | lised): | |
| Ecot | oxicology Assessmen | t | | |
| Acute | e aquatic toxicity | : | Very toxic to ac | quatic life. |
| Chro | nic aquatic toxicity | : | Very toxic to ac | quatic life with long lasting effects. |
| | zene, ethenyl-, copolyr Iylene-1,3-propanediyl | | | ione and Benzene, 1,1'-(1,1-dimethyl-3- e: |
| Ecot | oxicology Assessmen | t | | |
| Acute | e aquatic toxicity | : | Very toxic to ac | uatic life. |
| | istence and degradab ata available | ility | | |
| 2.3 Bioa | ccumulative potential | | | |
| Com | ponents: | | | |
| | erol, propoxylated, es | ters | with acrylic aci | 4. |
| Partit | tion coefficient: n- nol/water | | log Pow: 2.52 (| |
| | ility in soil ata available | | | |
| 12.5 Resu | ults of PBT and vPvB a | asse | ssment | |
| Prod | uct: | | | |
| Asse | ssment | : | to be either per | /mixture contains no components considered sistent, bioaccumulative and toxic (PBT), or and very bioaccumulative (vPvB) at levels of |
| 12.6 Endo | ocrine disrupting prop | ertie | S | |
| | ata available | | | |
| No d | er adverse effects | | | |
| | | | | |
| | uct: | | | |
| 12.7 Othe <u>Prod</u> Addit | uct: ional ecological nation | : | | tal hazard cannot be excluded in the event of handling or disposal. |

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|----------------|------------------------------|---------|------------------------|---|
| Com | ponents: | | | |
| Сор | per: | | | |
| | tional ecological mation | - | unprofessional ha | l hazard cannot be excluded in the event of andling or disposal. atic life with long lasting effects. |
| Glyc | erol, propoxylated, es | sters w | vith acrylic acid: | |
| | tional ecological mation | : | No data available | |
| zinc | powder — zinc dust (| stabili | sed): | |
| | tional ecological mation | - | unprofessional ha | I hazard cannot be excluded in the event of andling or disposal. atic life with long lasting effects. |

SECTION 13: Disposal considerations

| European Waste Catalogue | : | 08 03 12 - waste ink containing dangerous 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. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. |

SECTION 14: Transport information

14.1 UN number or ID numberADR:UN 3082IMDC:

| IMDG | : | UN 3082 |
|------------------------------|---|---|
| ΙΑΤΑ | : | UN 3082 |
| 14.2 UN proper shipping name | | |
| ADR | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Copper metal powder) |
| IMDG | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |

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| | | | (Copper metal po | owder) | |
| ΙΑΤΑ | A | : | Environmentally hazardous substance, liquid, n.o.s. (Copper metal powder) | | |
| 14.3 Trar | nsport hazard class(es) | | | | |
| | | | Class | Subsidiary risks | |
| ADR | ł | : | 9 | | |
| IMD | G | : | 9 | | |
| ΙΑΤΑ | A | : | 9 | | |
| 14.4 Pac | king group | | | | |
| Clas Haza Labe | king group sification Code ard Identification Number | | III M6 90 9 (-) | | |
| Labe | king group | : | III 9 F-A, S-F | | |
| Pack aircr Pack | king instruction (LQ) | : | 964 Y964 III 9 | | |
| Pacł (pas Pacł | A (Passenger) king instruction senger aircraft) king instruction (LQ) king group els | : | 964 Y964 III 9 | | |
| | ironmental hazards | | - | | |
| IMD | ronmentally hazardous G | : | yes | | |
| | ne pollutant | : | yes | | |
| - | cial precautions for use harks | er : | packagings conta | gings <=5L / 5 kg, or combination aining inner packagings <= 5L / 5 kg net per SV375 ADR, 2.10.2.7 IMDG-Code, A197 be applied. | |



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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) | : | Conditions of restriction for the following entries should be considered: Number on list 3 Glycerol, propoxylated, esters with acrylic acid (Number on list 3) Propylidynetrimethanol, ethoxylated, esters with acrylic acid (Number on list 3) 2,6-bis(1,1-dimethylethyl)-4- (phenylenemethylene)cyclohexa- 2,5-dien-1-one (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

| H302 | : Harmful if swallowed. |
|------|---|
| H315 | : Causes skin irritation. |
| H317 | : May cause an allergic skin reaction. |
| H319 | : Causes serious eye irritation. |
| H400 | : Very toxic to aquatic life. |
| H410 | : Very toxic to aquatic life with long lasting effects. |

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|---|---------------------------|---------------|--|--|
| H411 H413 Full te : | xt of other abbreviati | : : ons | • | fe with long lasting effects. asting harmful effects to aquatic life. |
| Acute Tox. Aquatic Acute Aquatic Chronic Eye Irrit. Skin Irrit. Skin Sens. GB EH40 GB EH40 / TWA GB EH40 / STEL | | | Acute toxicity Short-term (acute) aquatic hazard Long-term (chronic) aquatic hazard Eye irritation Skin irritation Skin sensitisation UK. EH40 WEL - Workplace Exposure Limits Long-term exposure limit (8-hour TWA reference period) 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 mix | ture: | Classification procedure: | | |
| Acute Tox. 4 | H302 | Calculation method | | |

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| Eye lı | rrit. 2 | H319 | Calculation method |
| Skin Sens. 1 | | H317 | Calculation method |
| Aquatic Acute 1 | | H400 | Calculation method |
| Aquat | tic 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.

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