

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

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : METALSTAR Eco 10 0874 PANTONE 874  
Material number : 072884RN0

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

This information is not available.

**1.3 Details of the supplier of the safety data sheet**

Company :  
  
Telephone :  
Telefax :  
E-mail address : msds.eckart@altana.com  
Responsible/issuing person

**1.4 Emergency telephone number****NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

**SECTION 2: Hazards identification****GHS Classification**

: Acute toxicity, Category 4, Oral, H302  
Serious eye damage/eye irritation, Category 2A, H319  
Short-term (acute) aquatic hazard, Category 1, H400

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

## METALSTAR Eco 10 0874 PANTONE 874

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Long-term (chronic) aquatic hazard, Category 1, H410

### GHS-Labeling

Symbol(s)



Signal word

: Warning

Hazard statements

: H302: Harmful if swallowed.  
 H319: Causes serious eye irritation.  
 H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**  
 P264 Wash skin thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear eye protection/ face protection.  
**Response:**  
 P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P391 Collect spillage.  
**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

### Hazardous components which must be listed on the label

Identification  
 copper

CAS-No.  
 7440-50-8

## SECTION 3: Composition/information on ingredients

Substance No.

:

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

**Hazardous components**

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
Copper	7440-50-8 231-159-6	Acute Tox.;4;H302 ;2A;H319 Aquatic Acute;1;H400 Aquatic Chronic;1;H410	25 - 50
zinc powder — zinc dust (stabilised)	7440-66-6 231-175-3	Aquatic Acute;1;H400 Aquatic Chronic;1;H410	2,5 - 10
amines, hydrogenated tallow alkyl	61788-45-2 (90640-32-7) 262-976-6	Acute Tox.;5;H303 ;2;H315 ;1;H318 STOT RE;2;H373 Asp. Tox.;1;H304 Aquatic Acute;1;H400 Aquatic Chronic;1;H410	0,25 - 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: First aid measures**
**4.1 Description of first aid measures**

- General advice : Move the victim to fresh air.
- 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

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

- 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**

This information is not available.

**4.3 Indication of any immediate medical attention and special treatment needed**

This information is not available.

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**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

**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.

**5.3 Advice for firefighters**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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.

**6.2 Environmental precautions**

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Use mechanical handling equipment.

Pick up and transfer to properly labelled containers.  
Do not flush with water.  
Contain spillage, and then collect with non-combustible

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

## METALSTAR Eco 10 0874 PANTONE 874

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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

Advice on safe handling : 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.

Normal measures for preventive fire protection.

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.

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

## METALSTAR Eco 10 0874 PANTONE 874

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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

#### Germany:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Copper	7440-50-8	AGW (inhalable fraction)	1 mg/m <sup>3</sup>		DE TRGS 900
zinc powder — zinc dust (stabilised)	7440-66-6	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			
zinc powder — zinc dust (stabilised)	7440-66-6	AGW (Alveolate fraction)	1,25 mg/m3	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).			

## 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 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.



**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Recommended preventive skin protection  
 Skin should be washed after contact.  
 The suitability for a specific workplace should be discussed  
 with the producers of the protective gloves.

- : The suitability for a specific workplace should be discussed  
 with the producers of the protective gloves.
- Skin and body protection : 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**

- General advice :
- : Prevent product from entering drains.  
 Prevent further leakage or spillage if safe to do so.  
 If the product contaminates rivers and lakes or drains inform  
 respective authorities.
- Water : The product should not be allowed to enter drains, water  
 courses or the soil.

**SECTION 9: Physical and chemical properties**
**9.1 Information on basic physical and chemical properties**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Appearance	: liquid
Colour	: gold
Odour	: characteristic
pH	: No data available
Freezing point	: No data available
Boiling point/boiling range	: > 100 °C
Flash point	: > 100 °C
Bulk density	: No data available
Flammability (solid, gas)	: No data available
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: No data available
Water solubility	: No data available
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available

**9.2 Other information**

No data available

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

No decomposition if stored and applied as directed.

**10.2 Chemical stability**

No decomposition if stored and applied as directed.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : 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**

Materials to avoid : No data available

**10.6 Hazardous decomposition products**

Hazardous decomposition products :

Other information : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

**Acute toxicity****Components:****Copper :**Acute oral toxicity : The component/mixture is moderately toxic after single  
ingestion.**zinc powder — zinc dust (stabilised) :**

Acute oral toxicity : Rat: &gt; 2 000 mg/kg

**amines, hydrogenated tallow alkyl :**

Acute oral toxicity : LD50 Rat: &gt; 2 000 - 5 000 mg/kg

Method: OECD Test Guideline 401

**Skin corrosion/irritation****Product**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product**

Eye irritation

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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No data available

**Toxicity to reproduction/fertility**

No data available

**Reprod.Tox./Development/Teratogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information**

**Product**

No data available

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**SECTION 12: Ecological information**

**12.1 Toxicity**

**Components:**

**copper (7440-50-8) :**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

M-Factor : 10

**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.

**zinc (7440-66-6) :****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.

**Amines, hydrogenated tallow alkyl (61788-45-2) :****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**

No data available

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

**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.

**SECTION 13: Disposal considerations****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** : 3082**TDG**

Not dangerous goods

**CFR**

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Not dangerous goods

**IMDG** : 3082**IATA** : 3082**14.2 Proper shipping name****ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Copper metal powder )**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(,Copper metal powder )**IATA** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S.  
(Copper metal powder)**14.3 Transport hazard class****ADR** : 9**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : 9**IATA** : 9**14.4 Packing group****ADR**



**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

Packaging group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9

**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG**

Packaging group : III  
Labels : 9  
EmS Number : F-A, S-F

**IATA**

Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packaging group : III  
Labels : 9

**14.5 Environmental hazards**

**ADR** : Environmentally hazardous

**IMDG** : Marine pollutant

**14.6 Special precautions for user**

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

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

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.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Prohibition/Restriction**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

**Prohibition/Restriction**

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

**Prohibition/Restriction**

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

**15.2 Chemical safety assessment**

No data available

**METALSTAR Eco 10 0874 PANTONE 874**

Version 3.0

Revision Date 06.12.2019

Print Date 07.08.2020

**SECTION 16: Other information****Full text of H-Statements**

H302	: Harmful if swallowed.
H303	: May be harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H373	: May cause damage to organs through prolonged or repeated exposure.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

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