

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

**ROTOVARIO Aqua 6 409 Richgold**

Version 3.0

Revision Date 10.12.2019

Print Date 06.08.2020

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

Trade name : ROTOVARIO Aqua 6 409 Richgold  
Material number : 025422KX0

**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

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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.

:

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**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	20 - 25
octadecylamine	124-30-1 204-695-3	STOT RE;2;H373 Asp. Tox.;1;H304 Eye Dam.;1;H318 Aquatic Acute;1;H400 Aquatic Chronic;1;H410 Skin Irrit.;2;H315	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 advice.

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	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.

**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.
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**5.3 Advice for firefighters**

Special protective equipment	: Wear self-contained breathing apparatus for firefighting if
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for firefighters

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 absorbent material, (e.g. sand, earth, diatomaceous earth,

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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.

Keep container tightly closed in a dry and well-ventilated

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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)				
Further information	Commission for dangerous substancesSenate commission for the				

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		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/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
Polyethylene glycol	25322-68- 3	AGW (Inhalable fraction)	1 000 mg/m <sup>3</sup>	2008-06-01	DE TRGS 900
Peak-limit: excursion factor (category)	8;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Polyethylene glycol	25322-68- 3	AGW (Inhalable fraction)	1 000 mg/m <sup>3</sup>	2008-06-01	DE TRGS 900
Peak-limit: excursion factor (category)	8;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Safety glasses



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- : Wear face-shield and protective suit for abnormal processing problems.
- Hand protection
- Material : Solvent-resistant gloves (butyl-rubber)
- Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
 The exact break through time can be obtained from the protective glove producer and this has to be observed.  
 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.  
 Recommended preventive skin protection  
 Skin should be washed after contact.  
 The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- : 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 :

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- : 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**

- 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

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Density	: No data available
Water solubility	: No data available
Miscibility with water	: No data available
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

**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.

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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).

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

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

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation**

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**Product**

Eye irritation

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

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) :**

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.

**octadecylamine (124-30-1) :**

M-Factor : 10

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

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### 12.5 Results of PBT and vPvB assessment

No data available

### 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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## 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.

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## SECTION 14: Transport information

### 14.1 UN number

ADR : 3082

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**TDG**

Not dangerous goods

**CFR**

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



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**14.4 Packing group****ADR**

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**

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**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

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

H302 : Harmful if swallowed.

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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 if swallowed.
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.