

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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

Trade name : ROTOVARIO 580 042 Rich Gold
Material number : 072508C20

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 : ECKART GmbH
Guentersthal 4
91235 Hartenstein
Telephone : +499152770
Telefax : +499152777008
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**

: Flammable solids, Category 1, H228
Acute toxicity, Category 4, Oral, H302
Serious eye damage/eye irritation, Category 2A, H319

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

Short-term (acute) aquatic hazard, Category 1, H400
Long-term (chronic) aquatic hazard, Category 1, H410

GHS-Labelling

Symbol(s)



Signal word

: Danger

Hazard statements

: H228: Flammable solid.
H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
P370 + P378 In case of fire: Use for extinction: Special powder for metal fires.
P370 + P378 In case of fire: Use for extinction: Dry sand.
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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

SECTION 3: Composition/information on ingredients

Substance name : rvario 580 042 rg

Substance No. :

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	50 - 100
zinc powder — zinc dust (stabilised)	7440-66-6 231-175-3	Aquatic Acute;1;H400 Aquatic Chronic;1;H410	25 - 50
ethyl acetate	141-78-6 205-500-4	Flam. Liq.;2;H225 Eye Irrit.;2A;H319 STOT SE;3;H336	10 - 20

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.

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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.

If on skin, rinse well with water.
If on clothes, remove clothes.
- 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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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

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. Use a water spray to cool fully closed containers.

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.
Remove all sources of ignition.

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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,
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.

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. Keep away from open flames, hot
surfaces and sources of ignition.

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.

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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.
- No smoking. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : Protect from humidity and water.
- Advice on common storage : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not store together with oxidizing and self-igniting products.
- 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 ³		DE TRGS 900

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

zinc powder — zinc dust (stabilised)	7440-66-6	AGW (Inhalable fraction)	10 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).			
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).			
ethyl acetate	141-78-6	AGW	200 ppm 730 mg/m3	2017-06-08	DE TRGS 900
Peak-limit: excursion factor (category)		2;(I)			
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).European Union (The EU has established a limit value: deviations in value and peak limit are possible)When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
ethyl acetate	141-78-6	STEL	400 ppm 1 468 mg/m3	2017-02-01	2017/164/EU
Further information		Indicative			
ethyl acetate	141-78-6	TWA	200 ppm 734 mg/m3	2017-02-01	2017/164/EU
Further information		Indicative			

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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.

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.

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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**

Appearance : Pasty solid

Colour : gold

Odour : characteristic

pH : No data available

Freezing point : No data available

Boiling point/boiling range : 76 °C

Flash point : No data available

Bulk density : No data available

Flammability (solid, gas) : The substance or mixture is a flammable solid

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

with the category 1.

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


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

Page 11 / 20	102000000598	A member of  ALTANA
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Globally Harmonized System of Classification and Labelling of
Chemicals (GHS)

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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.
Heat, flames and sparks.

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: > 2 000 mg/kg

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

ethyl acetate :

Acute oral toxicity : Rat: 5 620 mg/kg

Acute inhalation toxicity : LC50 Rat: 56 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 Rabbit: > 18 000 mg/kg

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

No data available

Toxicity to reproduction/fertility

No data available

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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

SECTION 12: Ecological information**12.1 Toxicity****Components:****copper (7440-50-8) :**

M-Factor : 10

Ecotoxicology AssessmentShort-term (acute) aquatic : Very toxic to aquatic life.
hazard

Long-term (chronic) aquatic : Very toxic to aquatic life with long lasting effects.

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

hazard

zinc (7440-66-6) :**Ecotoxicology Assessment**

Short-term (acute) aquatic : Very toxic to aquatic life.

hazard

Long-term (chronic) aquatic : Very toxic to aquatic life with long lasting effects.

hazard

ethyl acetate (141-78-6) :Toxicity to daphnia and other : (Daphnia (water flea)): 717 mg/l
aquatic invertebrates**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

12.6 Other adverse effects**Product:**Additional ecological : An environmental hazard cannot be excluded in the event of
information : unprofessional handling or disposal., Very toxic to aquatic life
with long lasting effects.

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

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.
Do not burn, or use a cutting torch on, the empty drum.
In accordance with local and national regulations. |

SECTION 14: Transport information**14.1 UN number**

- | | | |
|------|---|------|
| ADR | : | 1325 |
| TDG | : | 1325 |
| CFR | : | 1325 |
| IMDG | : | 1325 |
| IATA | : | 1325 |

14.2 Proper shipping name

- | | | |
|-----|---|--|
| ADR | : | FLAMMABLE SOLID, ORGANIC, N.O.S.
(Gold bronze paste ,Copper metal powder) |
| TDG | : | FLAMMABLE SOLID, ORGANIC, N.O.S.
(Gold bronze paste) |

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

CFR : FLAMMABLE SOLIDS, ORGANIC, N.O.S.
(Gold bronze paste)

IMDG : FLAMMABLE SOLID, ORGANIC, N.O.S.
(,Gold bronze paste ,Copper metal powder)

IATA : FLAMMABLE SOLID, ORGANIC, N.O.S.
(Gold bronze paste)

14.3 Transport hazard class

ADR : 4.1

TDG : 4.1

CFR : 4.1

IMDG : 4.1

IATA : 4.1

14.4 Packing group**ADR**

Packaging group : II

Classification Code : F1

Hazard Identification Number : 40

Labels : 4.1

Tunnel restriction code : (E)

TDG

Packaging group : II

Labels : 4.1

CFR

Packaging group : II

Labels : 4.1

IMDG

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

Packaging group : II
Labels : 4.1
EmS Number : F-G, S-G

IATA

Packing instruction (cargo aircraft) : 448
Packing instruction (passenger aircraft) : 445
Packing instruction (LQ) : Y441
Packaging group : II
Labels : 4.1

14.5 Environmental hazards

ADR : Environmentally hazardous
IMDG : Marine pollutant

14.6 Special precautions for user

IMDG Code- segregation group:
: IMDG Code segregation group 15 - Powdered metals

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**

REACH - Candidate List of Substances of Very High : Not applicable

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

ROTOVARIO 580 042 Rich Gold

Version 4.0

Revision Date 18.12.2019

Print Date 03.03.2022

Concern for Authorisation (Article 59).

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

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**

H225	: Highly flammable liquid and vapour.
H228	: Flammable solid.
H302	: Harmful if swallowed.
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness.
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.

SAFETY DATA SHEET



Globally Harmonized System of Classification and Labelling of
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ROTOVARIO 580 042 Rich Gold

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