

Material Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44400 Malachite, synthetic

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Revised edition: 20.10.2015

Version: 1

Printed: 02.11.2015

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Malachite, synthetic

Article No.: 44400

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Pharmaceutical agents
Chemical for syntheses

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC
Regulation 1272/2008

H302 Acute toxicity (oral), hazard category 4
Cat.: 4 Harmful if swallowed.

H332 Harmful if inhaled.

Cat.: 4

Classification according to EC
Regulation No. 67/548 or No. 1999/45

Harmful (Xn) R22 Harmful if swallowed.

Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

Classification according to EC
Regulation 1272/2008

Hazard designation:



GHS07-1

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Signal word:

Warning

Hazard designation:

H302 Harmful if swallowed.
H332 Harmful if inhaled.

Safety designation:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash thoroughly after handling.
P301+P312 If swallowed: Call a poison center or physician if you feel unwell.
P304+P340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a poison center or physician if you feel unwell.
P501 Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: $\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$ (basic copper carbonate with approx. 55 % Cu)

Hazardous Ingredients:

Cupric carbonate basic (Xn; R22; H302-332)

CAS-Nr: 12069-69-1

EINECS-Nr: 235-113-6

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Intoxication symptoms may occur after several hours, therefore a 48 hour medical observation is necessary.

After inhalation:

Supply fresh air.

After skin contact:

Remove contaminated clothing.

Wash with soap and rinse with plenty of water.

After eye contact:

Rinse open eyes with plenty of water. In case of discomfort seek medical help.

After ingestion:

Consult a doctor.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

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No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No further information available.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

*CO₂, extinguishing powder, water jet.
Fight larger fire with alcohol resistant foam.*

Unsuitable extinguishing media:

None known.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

No information available.

5. 3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

6. Accidental Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

No special measures required.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

6. 4. Reference to other Sections

For information for safe handling see Section 7.

Protective clothing, see Section 8.

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

The usual precautionary measures are to be adhered to when handling chemicals.

Provide adequate ventilation.

Hygienic measures:

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Do not inhale dust. Wash hands before breaks and at the end of work.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.

Requirements for storage areas and containers:

Keep container tightly closed.

Information on fire and explosion protection:

No special measures necessary.

Do not store together with: foodstuffs and animal feed.

Storage class (VCI):

Further Information:

Do not store together with: acids.

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

none known

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation/exhaust system.

Personal Protection

General protective measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and after work.

Respiratory protection:

Respirator mask required if ventilation is insufficient. Wear filter respirator in case of short-term or low exposure, and wear a self-contained breathing apparatus in case of long-term or higher exposure.

Hand protection:

Chemical protective gloves (EN 374 (Europe), F739 (US)).

Protective glove material:

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Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: green

Odor: odorless

Odor threshold:
No information available.

pH-Value:
not available

Melting temperature:
not available

Boiling temperature:
not applicable

Flash point:
not applicable

Evaporation rate:
No information available.

Flammability (solid, gas):
not applicable

Upper explosion limit:
no information available

Lower explosion limit:
no information available

Vapor pressure:
not determined

Vapor density:
No information available.

Density: 4.0 g/cm³ (20°C)

Solubility in water: insoluble

Coefficient of variation (n-Octanol/Water):
no information available

Auto-ignition temperature:

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not determined

Decomposition temperature: 200°C

Viscosity, dynamic:
not applicable

Explosive properties:
not available

Oxidizing properties:
no information available

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Reacts with acids.

10.4. Conditions to Avoid

Conditions to avoid:

No information available.

Thermal decomposition:

10.5. Incompatible Materials

Acids

10.6. Hazardous Decomposition Products

Carbon oxides

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral: 1350 mg/kg (rat)

LD50, dermal:

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No information available.

LC50, inhalation:

No information available.

Primary effects

Irritant effect on skin:

Non irritating

Irritant effect on eyes:

Non-irritating to eyes

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

Mutagenicity:

No data available.

Reproductive toxicity:

No data available.

Carcinogenicity:

No data available.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No data available.

Additional toxicological information:

12. Ecological Information

12. 1. Aquatic Toxicity

No information available.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12. 2. Persistency and Degradability

No information available.

12. 3. Bioaccumulation

No information available.

12. 4. Mobility

No information available.

12. 5. Results of PBT- und vPvP Assessment

Not applicable.

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12. 6. Other Adverse Effects

Water hazard class:

2 (German Regulation) (Assessment by list): hazardous.

Do not let product contaminate ground water, waterways or sewage system.

Danger to drinking water even if small quantities leak into the ground.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel no.:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

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14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

2, hazardous for water

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

Classification III: 100 %

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment is not necessary for this product.

15. 3. Further Information

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.