

Safety Data Sheet

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



27050 Kremer Color Paste - Biflair® 83

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Revised edition: 17.04.2024

Version: 3

Printed: 24.07.2025

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

1.1. Product Identifier

Product Name: Kremer Color Paste - Biflair® 83

Article No.: 27050

UFI: P4QF-M940-M5SY-N7EN

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

Identified uses: Coloring agent

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.com

EMail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

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

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

H317 Skin sensitization, hazard category 1
Cat.: 1
Hazardous to the aquatic environment, hazard category 3
May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
Cat.: 3

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:



GHS07-1

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Signal word:

Warning

Hazard designation:

H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Safety designation:

P260a Do not breathe dust.
P273 Avoid release to the environment.
P280 Wear protective gloves/ clothing/ eye/ face protection.
P302+P352 If on skin: Wash with soap and water.

Hazardous components for labelling:

2.3. Other Hazards

Contains a mixture of 5-Chloro-2-methylisothiazolin-3(2H)-one (EG 247-500-7) and 2-Methylisothiazol-3(2H)-one (EG 220-239-6) (3:1): can cause allergic reactions.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Bismuth oxide chloride, additives

Information on Components / Hazardous Ingredients:

Ammonia solution (H314-318-332-335-400(M=1)-411); REACH Reg. No. 01-2119488876-14	0.1 - 0.25 %	CAS-Nr: 1336-21-6 EINECS-Nr: 215-647-6 EC-Nr: 007-001-01-2
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Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1) (H301-310-314-317-318-330-400-H410); Spec. conc. limits: H314 >= 0.6%, H315 0.06 - <0.6%, H319 0.06 - <0.6%, H317 >= 0.0015%, H318 >= 0.6%; REACH Reg. No. 01-2120764691-48	0.0025-0.025 %	CAS-Nr: 55965-84-9 EINECS-Nr: EC-Nr: 613-167-00-5
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.
Take affected person to fresh air.

After skin contact:

Wash off with plenty of water.
Remove contaminated clothing immediately.

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After eye contact:

Immediately flush open eyes with plenty of water.

Remove contact lens.

After ingestion:

Give water to drink (at the most 2 glasses). Consult a physician in case of complaints.

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

Symptoms:

Allergic reactions.

Effects:

No further information available.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Product is not flammable.

In case of fire: hazardous vapors may be released.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

Suppress escaping gases/fumes/mist with a water spray jet.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid inhalation of dust.

Evacuate the danger area, observe emergency procedures, consult an expert.

Wear protective clothing.

6.2. Environmental Precautions

Environmental precautions:

No special measures required.

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6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable container for disposal. Rinse spill area. Avoid dust formation.

6.4. Reference to other Sections

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.

Hygienic measures:

Change contaminated clothing. Wash hands after 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.

Storage class:

10-13 (TRSG 510)

Further Information:

7.3. Specific End Use(s)

Further information:

See Section 1.2.; no other uses provided

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Does not contain any components with workplace limit values.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Ammonium solution (1336-21-6):

6.8 mg/m³ (consumer, swallowing, short and long-term exposure - systemic effects)

47.6 mg/m³ (worker, inhalation, short-term/long-term exposure - systemic effects)

36 mg/m³ (worker, inhalation, short-term exposure - local effect)

14 mg/m³ (worker, inhalation, long-term exposure - local effects)

68 mg/kg (consumer, skin contact, short and long-term exposure,

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systemic effects)
23.8 mg/m³ (consumer, inhalation, short and long-term exposure - systemic effects)
7.2 mg/m³ (consumer, inhalation, short-term exposure - local effect)
2.8 mg/kg (consumer, inhalation, long-term exposure - local effects)
6.8 mg/m³ (consumer, swallowing, short and long-term exposure - systemic effects)

PNEC (Predicted No-Effect Concentration):

Ammonium solution (1336-21-6):
Fresh water: 0.0011 mg/l
Sea water: 0.00011 mg/l
Intermittent release: 0.0068 mg/l

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Technical protective measures have priority to personal protective measures.

Personal Protection

General protective measures:

Wash hands before breaks and after work.

Respiratory protection:

Not required.

Hand protection:

Not required

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

Environmental precautions:

Prevent contamination of open water ways and sewage system.
Avoid contamination of ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: paste
Color: metallic
Odor: ammonium-like
Odor threshold:

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	<i>ammonia</i>
<i>pH-Value:</i>	<i>not available</i>
<i>Melting temperature:</i>	<i>not available</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not flammable</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>1.6 - 2.0 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>no data available</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>no information available</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not available</i>
<i>Explosive properties:</i>	<i>not explosive</i>
<i>Oxidizing properties:</i>	<i>no information available</i>
<i>Bulk density:</i>	<i>not determined</i>

9.2. Further Information

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Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Particle characteristics: This substance/ mixture contains nanoforms.

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable at room temperature.

10.3. Possibility of Hazardous Reactions

No information available.

10.4. Conditions to Avoid

Conditions to avoid:

No further information available.

Thermal decomposition:

No data available.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral:

No information available

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-on (EC 247-500-7) and 2-methyl-2H-isothiazol-3-on (EC 220-239-6) (3:1): 457 mg/kg

LD50, dermal:

No information available.

Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-on (EC 247-500-7) and 2-methyl-2H-isothiazol-3-on (EC 220-239-6) (3:1): 87.12 mg/kg (rabbit)

LC50, inhalation:

No information available.

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Mixture of: 5-chloro-2-methyl-2H-isothiazol-3-on (EC 247-500-7) and 2-methyl-2H-isothiazol-3-on (EC 220-239-6) (3:1): 0.33 mg/kg (4h, rat; OECD 403)

Primary effects

Irritant effect on skin:

Ammonia solution: Causes chemical burns.

Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): Severe irritation (4h, rabbit; OECD 404)

Irritant effect on eyes:

Ammonia solution: Risk of blindness! Causes serious eye damage.

Reaktion compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): risk of severe eye damage (rabbit)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): may cause sensitization by skin contact (guinea pig; OECD 406)

Mutagenicity:

Reaction mass of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazol-3-one (3:1): In vitro and in vivo tests showed no mutagenic effects.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No relevant data found.

Specific target organ toxicity (STOT):

Single exposure:

Ammonia solution (1336-21-6): May irritate the respiratory tract.

Repeated exposure: no information available.

Aspiration hazard:

No risk of aspiration.

11. 2. Information on other Hazards

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No.

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1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.

Avoid inhalation of dust. Even inert dusts can impair the function of the respiratory system.

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological Information

12.1. Aquatic Toxicity

Ammonia solution: Very toxic to aquatic organisms. M-Factor: 1
Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazol-3-one (3:1): Very toxic for aquatic organisms, with long-term adverse effects.

Fish toxicity:

*Reaction mass of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): LC50: 0.19 mg/l (96h, *Oncorhynchus mykiss*); NOEC: 0.046 mg/l (35d; OECD 210)*

Daphnia toxicity:

*Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): EC50: 0.16 mg/l (48h, *Daphnia magna*); NOEC: 0.1 mg/l (21d, *Daphnia magna*)*

Bacteria toxicity:

Algae toxicity:

*Reaction compound of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): ErC50: 0,037 mg/l (72h, *Selenastrum capricornulum*)*

12.2. Persistency and Degradability

Reaction mass of 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): Not readily biodegradable.

12.3. Bioaccumulation

Reaction compound of: 5-Chloro-2-methyl-2H-isothiazole-3-one and 2-Methyl-2H-isothiazole-3-one (3:1): log POW: -0.71 - 0.75 (OECD 107)

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvB Assessment

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

12.6. Endocrine Disrupting Properties

This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) No. 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12.7. Other Adverse Effects

Water hazard class:

3, hazardous

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Behaviour in sewage systems:

Further ecological effects:

Avoid release into the environment.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and local regulations. Leave chemical in original containers.

Do not mix with other waste.

European Waste Code (EWC):

Uncleaned packaging:

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 / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14.4. Packaging Group

ADR/RID:

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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. Maritime Transport in Bulk according to IMO Instruments

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:

3, very hazardous for water (German Regulation)

Local regulations on chemical accidents:

Seveso III Directive: not applicable under Directive 2012/18/EC.

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 3

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15. 3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable
Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable
Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable

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.