

Safety Data Sheet

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



36003 Indigo made of Woad

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Revised edition: 23.11.2017

Version: 2

Printed: 30.06.2020

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

1.1. Product Identifier

Product Name: Indigo made of Woad

Article No.: 36003

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

Identified uses:
Pigment in artists colors.

Uses advised against:
Not for foods or feed

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

E-Mail: 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)

H373

Cat.: 2

Specific target organ toxicity (repeated exposure), hazard category 2

May cause damage to organs through prolonged or repeated exposure.

Possible Environmental Effects:

2.2. Label Elements

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

Hazard designation:



GHS08-1

Signal word:

Warning

Hazard designation:

H373

May cause damage to organs through prolonged or repeated exposure.

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Safety designation:

P260a

Do not breathe dust.

P314

Get medical advice/attention if you feel unwell.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Natural organic product.

Indigo made of Woad, *Isatis tinctoria*

Information on Components / Hazardous Ingredients:

2-(1,3-Dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-3H-indol-3-one (STOT RE2; H373)

ca. 95 %

CAS-Nr: 482-89-3

EINECS-Nr: 207-586-9

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

No special measures required.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

Wash off immediately with soap and plenty of water.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes.

Seek medical attention if irritation persists.

After ingestion:

Rinse mouth with plenty of water and give 1 - 2 glasses of water to drink.

If symptoms persist consult physician.

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

Symptoms:

No further information available.

Effects:

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:

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

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

*In case of fire: hazardous gases/vapors may be released.
In case of fire: formation of carbon monoxide, carbon dioxide and organic decomposition products.*

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing.

6.2. Environmental Precautions

Environmental precautions:

Dilute with plenty of water.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

Rinse with lots of water.

6.4. Reference to other Sections

For information for safe handling see Section 7.

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.

Hygienic measures:

Wash hands at the end of work. Preventive skin protection recommended.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry and cool room.

Protect against heat and direct sunlight.

Protect from frost.

Protect against humidity and water.

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Product is hygroscopic.

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:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

none known

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Respiratory protection:

Not required.

Hand protection:

Preventive skin protection is recommended. Wash hands after working with substance.

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

Environmental precautions:

No special measures required.

9. Physical and Chemical Properties

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9. 1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>blue</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>not relevant</i>
<i>pH-Value:</i>	<i>not available</i>
<i>Melting temperature:</i>	<i>not determined</i>
<i>Boiling temperature:</i>	<i>not applicable</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>This product is a non-volatile solid.</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</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>This product is a non-volatile solid.</i>
<i>Density:</i>	<i>> 1 g/cm³</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>not determined</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	<i>not applicable</i>
<i>Oxidizing properties:</i>	

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no information available

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

Product is hygroscopic.

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 strong oxidants.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid humidity.

Avoid heat.

Thermal decomposition:

10.5. Incompatible Materials

Strong acids and strong oxidizing agents.

10.6. Hazardous Decomposition Products

Carbon monoxide and dioxide.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

2-(1,3-Dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-3H-indol-3-one:

LD50, oral:

> 6400 mg/kg (rat)

LD50, dermal:

No information available.

LC50, inhalation:

No information available.

Primary effects

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Irritant effect on skin:

No irritant effect known.

Irritant effect on eyes:

No irritant effect known.

Inhalation:

No irritant effect known.

Ingestion:

No irritant effect known.

Sensitization:

No sensitizing effects known.

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No relevant data found.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

12. Ecological Information

12.1. Aquatic Toxicity

2-(1,3-Dihydro-3-oxo-2H-indol-2-ylidene)-1,2-dihydro-3H-indol-3-one:

Fish toxicity:

LC50: > 10000 mg/l (96h, Leuciscus idus)

Daphnia toxicity:

EC50: > 500 mg/l (48h, Daphnia magna)

Bacteria toxicity:

No data available.

Algae toxicity:

EC50: > 100 mg/l (72h, Desmodesmus subspicatus; OECD 201)

12.2. Persistency and Degradability

Not readily biodegradable (0 %, 28d; OECD 301C)

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

This product is neither a PBT or vPvB substance nor does it

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contain a PBT or vPvB substance.

12. 6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

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.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled.

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 restriction code:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

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ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

Not classified as environmentally hazardous.

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:

0, not hazardous (German Regulation; Self-assessment)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

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.

Sources: <https://echa.europa.eu> (registration-dossiers and C&L inventory), ECHA-Guide d'élaboration des fiches de données de sécurité Version 3.1 Novembre 2015 www.inrs.fr: (Fiche Toxicologique INRS)

D. Cardon et G. du Chatenet, Guide des Teintures Naturelles, Delachiaux et Niestlé (ed), Paris 1990