

# Safety Data Sheet

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



## 36004 Indigo, Japanese polygonum

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Revised edition: 12.07.2022

Version: 3.0

Printed: 13.07.2022

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

#### 1.1. Product Identifier

*Product Name:* Indigo, Japanese polygonum

*Article No.:* 36004

*UFI:* --

#### 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

*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)*

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:*

May cause damage to organs through prolonged or repeated exposure

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H373 exposure.

*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

*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:
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*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

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### *Suitable extinguishing media:*

CO<sub>2</sub>, 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:*

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## 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.

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## 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.

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*Protect against humidity and water.*

*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:*

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## 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.*

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### 9. Physical and Chemical Properties

#### 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>&gt; 1 g/cm<sup>3</sup></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>

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*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:*

*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:*

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## 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:*

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### 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:*

*Non-contaminated packaging may be recycled.*

*Waste Code No.:*

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### 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):*

*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

*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

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## 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

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## 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](http://www.inrs.fr): (Fiche Toxicologique INRS)*

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