23100  Indanthren® Blue

1. Identification of the Substance/Mixture and of the Company/Undertaking
   1.1. Product Identifier
       Product Name: Indanthren® Blue
       Article No.: 23100

   1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against
       Identified uses: Coloring agent for dye and varnish industry
       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
       EMail: 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 Regulation (EC) No. 1272/2008 (CLP/GHS)
       This product does not require classification and labelling as hazardous according to CLP/GHS.

       Classification according to Directive No. 67/548/EC or No. 1999/45/EC
       The material is not subject to classification according to EC lists.

       Safety Phrases:
       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: Not applicable.

       Signal word:
       Hazard designation:
       Safety designation:
       Hazardous components for labelling:

       Other Hazards
2.3. Risk of dust explosion under certain conditions.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: C.I. Pigment Blue 60
Preparation made of: indanthrone pigment

Information on Components / Hazardous Ingredients:

<table>
<thead>
<tr>
<th>Alcohol, C16-18, Ethoxylated, &gt; 20 EO (Eye Irrit. 2; H319)</th>
<th>0 - 5%</th>
<th>CAS-Nr: 68439-49-6</th>
</tr>
</thead>
</table>
| EINECS-Nr: 500-212-8
| EC-Nr:                                                     |        |                  |

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information: Remove contaminated clothes.

After inhalation: Supply fresh air and seek medical advice in case of complaints.

After skin contact: Wash off with plenty of water and soap.

After eye contact: Rinse open eyes with plenty of water for at least 15 minutes.

After ingestion: Rinse mouth with water and drink plenty of water.

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

Symptoms: No further information available.

Effects: No further information available.

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

Treatment: Symptomatic treatment (decontamination, vital functions), no specific antidote known.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media: Extinguishing powder, foam.

Unsuitable extinguishing media: Carbon dioxide (CO2)
5.2. Special Hazards arising from the Substance or Mixture

Special hazards: In case of fire: hazardous gases/vapors may be released.

5.3. Advice for Firefighters

Protective equipment: Wear self-contained respiratory protective device.

Further information: Dispose of fire debris and contaminated extinguishing water in accordance with local regulations. Avoid formation of dust: risk of dust explosion.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions: Avoid formation of dust, wear protective clothing.

6.2. Environmental Precautions

Environmental precautions: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:
- Large spills: Clean up with suitable appliance and dispose adequately.
- Small spills: Contain with dust binding material and dispose accordingly. Avoid dust formation.

6.4. Reference to other Sections

Protective clothing, see Section 8.
See Section 13 for information on disposal.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling: Respiratory protection when handling without exhaust system.

Hygienic measures: No further measures, see Section 8.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions: Store in tightly sealed containers in a cool and well ventilated location.

Requirements for storage areas and containers: No special measures necessary.

Information on fire and explosion
23100  Indanthren® Blue

Protection:

Take measures to prevent electrostatic discharge.
Avoid dust formation.

Storage class (VCI):

11; Combustible solids

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):

TRGS 900
TLV: 1.25 mg/m³ air-borne fraction (general dust limit)
TLV: 10 mg/m³ inhalable fraction (general dust limit)
Category II: substances with a resorptive effect.

Parameters to be controlled:
Derived No-Effect Level (DNEL):
Predicted No-Effect Concentration (PNEC):
Additional Information:

8. 2. Exposure Controls

Technical protective measures:
Provide adequate ventilation in case of dust formation.

Personal Protection

General protective measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Protective clothing recommended due to the coloring effects of the product.

Respiratory protection:
Suitable respiratory protection for lower concentration or short-term effect: particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, type P2 or FFP2).

Hand protection:
Chemical protective gloves (EN 374 (Europe), F739 (US)).
The manufacturer’s directions for use should be observed because of the great diversity of types.

Protective glove material:
Recommended: min. 0.4 mm thickness, breakthrough time > 480 min.
Nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm).

Eye protection:

next page: 5
Body protection:

Safety glasses with protective shields (EN 166).

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: powder

Color: blue

Odor: odorless

Odor threshold: No information available.

pH-Value: 9 - 10 (10 g/l)

Melting temperature: > 300°C

Boiling temperature: not determined

Flash point: not available

Evaporation rate: This product is a non-volatile solid.

Flammability (solid, gas): not easily flammable

Upper explosion limit: not determined

Lower explosion limit: not determined

Vapor pressure: not applicable

Vapor density: No information available.

Density: ca. 1.45 g/cm³ (20°C)

Solubility in water: insoluble

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

Auto-ignition temperature: Product is not auto-ignitable.

Decomposition temperature: No data available.
23100  Indanthren® Blue

Viscosity, dynamic: not applicable

Explosive properties: Product does not present an explosion hazard.

Oxidizing properties: not oxidizing

Bulk density: 300 - 600 kg/m³

9.2.  Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

Other information: Product is not hygroscopic.

Self-heating ability: This product is not self-heating.

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

Risk of dust explosion.

10.4.  Conditions to Avoid

Conditions to avoid:

Avoid heat and sources of ignition.

Avoid formation of dust.

Thermal decomposition:

No decomposition if used according to specifications.

10.5.  Incompatible Materials

No information available.

10.6.  Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7.  Further Information

11.  Toxicological Information

11.1.  Information on Toxicological Effects

Acute Toxicity

LD₅₀, oral: > 5000 mg/kg (rat)

Not toxic after single oral exposure.
LD50, dermal:  > 1050 mg/kg (OECD 402)
LC50, inhalation:  > 5.5 mg/l (4h, rat; OECD 403)

Primary effects
Irritant effect on skin:  Non irritating (rabbit)
Irritant effect on eyes:  Non-irritating to eyes (rabbit; OECD 405)
Inhalation:  No information available.
Ingestion:  No information available
Sensitization:  No sensitizing effects known.
Mutagenicity:  No mutagenic effects known.
Reproductive toxicity:  No negative effects.
Carcinogenicity:  No cancerogenic effect (estimated).
Teratogenicity:  Not considered to be teratogenic.
Specific target organ toxicity (STOT):  No relevant data found.
Additional toxicological information:  Aspiration hazard: not applicable

12. Ecological Information
12.1. Aquatic Toxicity
Fish toxicity:  
LC50:  > 100 mg/l (96h, Leuciscus idus)
Daphnia toxicity:  Not toxic within the solubility limit.
Bacteria toxicity:  EC50:  > 100 mg/l (0.5h, active sludge)
Algae toxicity:  Not toxic within the solubility limit.

12.2. Persistence and Degradability
The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

12.3. Bioaccumulation
No bioaccumulation expected.
23100  Indanthren® Blue

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): this product is neither a PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative/very toxic) substance nor does it contain a PBT or vPvB substance.

12.6. Other Adverse Effects

Water hazard class:

1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:

Treatment and discharge of waste water into biological treatment plant should be carried out according to official national and local regulations.

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

In accordance with current regulations, product may be taken to a waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled.
Packaging may be disposed of in the same manner as the product.

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:
14.4 Packaging Group

ADR/RID:

not applicable

IMDG:

not applicable

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

Not classified as a dangerous good under transport regulations.

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (German Regulation, Assessment by list)

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 has not yet been carried out for this product.

15.3 Further Information

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: 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.