

# Safety Data Sheet

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



## 56849 Thermochrome Pigment Dark Blue

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Revised edition: 20.02.2017

Version: 1

Printed: 14.08.2019

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

#### 1.1. Product Identifier

*Product Name:* Thermochrome Pigment Dark Blue

*Article No.:* 56849

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

*Identified uses:*

*Industrial application*

*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

*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)*

H315	Skin irritation, hazard category 2
Cat.: 2	Skin sensitization, hazard category 1
H317	Eye irritation, hazard category 2
Cat.: 1	Causes skin irritation.
H319	May cause an allergic skin reaction.
Cat.: 2	Causes serious eye irritation.

*Possible Environmental Effects:*

#### 2.2. Label Elements

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

*Hazard designation:*



GHS07-1

*Signal word:*

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### Warning

#### Hazard designation:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

#### Safety designation:

P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P302	If on skin:
P352	Wash with soap and water.

#### Hazardous components for labelling:

### 2.3. Other Hazards

## 3. Composition/Information on Ingredients

### 3.1. Substance

### 3.2. Mixture

#### Chemical Characterization:

#### Information on Components / Hazardous Ingredients:

Poly(styrene-alt-maleic anhydride), partial methyl (H315-319-335)	55 - 75 %	CAS-Nr: 31959-78-1 EINECS-Nr: 663-534-9 EC-Nr:
7-[4-(Diethylamino)-2-ethoxyphenyl]-7-(1-ethyl-2-methyl-1H-indol-3-yl)furo[3,4-b]pyridin-5(7H)-one (H302-315-319-335)	2 - 4.9 %	CAS-Nr: 69898-40-4 EINECS-Nr: 274-194-2 EC-Nr:
Polyoxymethylene melamine (H315-317)	19 - 27 %	CAS-Nr: 9003-08-01 EINECS-Nr: 618-354-5 EC-Nr:

#### Additional information:

## 4. First Aid Measures

### 4.1. Description of the First Aid Measures

#### General information:

*Immediately get medical help.*

#### After inhalation:

*Supply fresh air. Consult physician if symptoms persist.*

#### After skin contact:

*Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.*

*If symptoms persist, consult a physician.*

#### After eye contact:

*Remove contact lens. Rinse open eyes with plenty of water (10-15*

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*min). Should irritation continue, seek medical advice.*

*After ingestion:*

*Immediately get medical help.*

*Never give anything by mouth to an unconscious person.*

*Do not induce vomiting without medical advice.*

### 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.*

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## 5. Fire-Fighting Measures

### 5.1. Extinguishing Media

*Suitable extinguishing media:*

*Foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder, water mist.*

*Unsuitable extinguishing media:*

*None known.*

### 5.2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*Combustible material.*

*May cause explosive gas-air-mixtures.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*Wear suitable protective clothing.*

*Further information:*

*Cool exposed containers with water spray.*

*Avoid contamination of sewage system, open water ways and ground water.*

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## 6. Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Avoid formation of dust, wear protective clothing.*

*Avoid contact with skin, eyes and clothing.*

### 6.2. Environmental Precautions

*Environmental precautions:*

*Prevent contamination of soils, drains and surface water.*

### 6.3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.*

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### 6. 4. Reference to other Sections

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

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## 7. Handling and Storage

### 7. 1. Precautions for Safe Handling

*Instructions on safe handling:*

*Avoid contact with eyes, skin and clothing.*

*Hygienic measures:*

*Change contaminated clothing. Wash hands after work.*

### 7. 2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Protect product from direct sunlight.  
Store in tightly sealed containers in a well ventilated location.*

*Requirements for storage areas and containers:*

*Store the product in the original container.*

*Information on fire and explosion protection:*

*Keep away from open flames, hot surfaces and sources of ignition.  
Take precautionary measures against static discharges.*

*Storage class:*

*Further Information:*

### 7. 3. Specific End Use(s)

*Further information:*

*No information available.*

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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:*

*Technical protective measures have priority to personal protective measures.*

*Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.*

*Personal Protection*

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### *General protective measures:*

*Remove contaminated clothing immediately.*

*Wash contaminated clothes before reuse.*

### *Respiratory protection:*

*Required in case of insufficient ventilation.*

*Recommended: Particle filter P1-P3*

### *Hand protection:*

*Protective gloves (EN 374)*

### *Protective glove material:*

*Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers.*

### *Eye protection:*

*Safety glasses (EN 166)*

### *Body protection:*

*Protective suit with long sleeves.*

### *Environmental precautions:*

*Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.*

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## **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: not available*

*Melting temperature: not available*

*Boiling temperature: not available*

*Flash point: not available*

*Evaporation rate: No information available.*

*Flammability (solid, gas): not available*

*Upper explosion limit:*

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*no information available*

*Lower explosion limit:*

*no information available*

*Vapor pressure:*

*not applicable*

*Vapor density:*

*No information available.*

*Density:*

*0.9 - 1.2 g/cm<sup>3</sup>*

*Solubility in water:*

*insoluble*

*Coefficient of variation (n-  
Octanol/Water):*

*no information available*

*Auto-ignition temperature:*

*No information available.*

*Decomposition temperature:*

*No data available.*

*Viscosity, dynamic:*

*not applicable*

*Explosive properties:*

*not available*

*Oxidizing properties:*

*No information available.*

*Bulk density:*

*not determined*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

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### 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.*

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### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Avoid formation of dust.*

*Thermal decomposition:*

### 10.5. Incompatible Materials

*None known.*

### 10.6. Hazardous Decomposition Products

*No information available.*

### 10.7. Further Information

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## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

*Acute Toxicity*

*LD50, oral:*

*> 2000 mg/kg*

*Ethyl stearate: > 5000 mg/kg*

*Methyl stearate: > 2000 mg/kg*

*Methyl palmitate: > 2000 mg/kg*

*LD50, dermal:*

*Ethyl stearate: > 5000 mg/kg*

*LC50, inhalation:*

*Methyl stearate: >5 mg/kg (4h)*

*Methyl stearate: >5 mg/kg (4h)*

*Primary effects*

*Irritant effect on skin:*

*Irritating to skin.*

*Irritant effect on eyes:*

*Causes serious eye irritation.*

*Inhalation:*

*No information available.*

*Ingestion:*

*No information available*

*Sensitization:*

*May cause sensitization by skin contact.*

*Mutagenicity:*

*Not mutagenic.*

*Reproductive toxicity:*

*No relevant data found.*

*Carcinogenicity:*

*No relevant data found.*

*Teratogenicity:*

*No relevant data found.*

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### *Specific target organ toxicity (STOT):*

*No relevant data found.*

### *Additional toxicological information:*

*Aspiration hazard: not applicable*

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## 12. Ecological Information

### 12.1. Aquatic Toxicity

#### *Fish toxicity:*

*Methyl palmitate: 550 mg/l (96h)*

#### *Daphnia toxicity:*

#### *Bacteria toxicity:*

#### *Algae toxicity:*

### 12.2. Persistency and Degradability

*Methyl palmitate: readily biodegradable*

### 12.3. Bioaccumulation

*No information available.*

### 12.4. Mobility

*No information available.*

### 12.5. Results of PBT- und vPvP Assessment

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

### 12.6. Other Adverse Effects

#### *Water hazard class:*

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

#### *Behaviour in sewage systems:*

#### *Further ecological effects:*

#### *AOX Value:*

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## 13. Disposal Considerations

### 13.1. Waste Treatment Methods

#### *Product:*

*In accordance with current regulations, product may be taken to 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. Completely empty packaging can be disposed of with the regular waste.*

#### *Waste Code No.:*

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## 14. Transport Information

### 14.1. UN Number

*ADR, IMDG, IATA*

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### 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

*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

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## 15. Regulatory Information

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

*Water hazard class:*

*2, hazardous for water (German Regulation)*

*Local regulations on chemical accidents:*

*Employment restrictions:*

*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: not applicable*

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*Technical instructions on air quality:*

### 15.2. Chemical Safety Assessment

*EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern above the legal limit value (> 0.1 % (w/w) REACH Regulation (EC) 1907/2006, Article 57).*

*A Chemical Safety Assessment has not been carried out 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.*