

# Safety Data Sheet

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



## 24120 Special Black NIR

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Revised edition: 17.01.2023

Version: 1

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

#### 1.1. Product Identifier

*Product Name:* Special Black NIR

*Article No.:* 24120

*UFI:* --

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

*Identified uses:*

*Colorant for the plastics industry  
Coloring agent for dye and varnish industry  
Coloring agent for industrial purposes*

*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)*

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

*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**

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2.3. *Can cause combustible dust concentrations in the air.  
Dust may be produced when working with this material, which can cause a mechanical irritation of eyes, nose and respiratory tract.*

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### 3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

*Chemical Characterization:* Perylene Black (PBk 31, C.I. 71132)

*Information on Components / Hazardous Ingredients:*

2,9-Bis(2-phenylethyl)anthra [2,1,9-def:6,5,10-d'e'f'] diisochinoline-1,3,8,10(2H,9H)-tetrone	100 %	CAS-Nr: 67075-37-0 EINECS-Nr: EC-Nr:
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*Additional information:*

*Particle characteristics:  
Form: Spheres (Aspect ratio (x) = 1 - 3 [TEM]); crystalline; Agent (s): no specific treatment; Specific surface area: 15 - 100 m<sup>2</sup>/m<sup>3</sup> (BET)  
Size distribution d<sub>10</sub>: 30 - 60 nm; d<sub>50</sub>: 60 - 100 nm; d<sub>90</sub>: 90 - 180 nm*

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### 4. First Aid Measures

4.1. Description of the First Aid Measures

*General information:*

*If symptoms occur, or in case of doubt seek medical advice.  
Never give anything by mouth to an unconscious person.  
Stable side position in case of unconsciousness.*

*After inhalation:*

*Supply fresh air and keep patient calm.  
Give artificial respiration in case breathing is not regular or if it has stopped.*

*After skin contact:*

*Wash with plenty of water and soap. Remove contaminated clothing and shoes.  
Do not use solvents or thinners.*

*After eye contact:*

*Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.*

*After ingestion:*

*Immediately get medical help.  
Do not induce vomiting.*

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

*Symptoms:*

*Exposure to high concentrations of dust may result in upper respiratory tract (nose and throat) and pulmonary irritation.*

*Effects:*

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### 4. 3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.*

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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 spray.*

*Unsuitable extinguishing media:*

*Water with full jet.*

### 5. 2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.*

*In case of fire: formation of carbon oxides, nitrogen oxides and fumes.*

### 5. 3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Further information:*

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## 6. Accidental Release Measures

### 6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Avoid inhalation of dust.*

*Wear protective clothing.*

### 6. 2. Environmental Precautions

*Environmental precautions:*

*Do not discharge into drains, surface or ground water in concentrated form.*

*Contact local authorities if product pollutes waterways or the sewage system.*

### 6. 3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Contain with non-flammable absorbent material (e.g. sand, diatomaceous earth, vermiculite) and dispose accordingly.*

*Clean polluted are with water or other cleaning fluids.*

*Do not use solvents for cleaning.*

### 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

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### *Instructions on safe handling:*

*Avoid formation of dust. Do not inhale dust.  
Wear adequate protective clothing (see para. 8).*

### *Hygienic 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.  
Clean contaminated clothing before entering eating areas.*

## 7.2. Conditions for Safe Storage, including any Incompatibilities

### *Storage conditions:*

*Store in tightly sealed containers in a dry and well ventilated location.*

*Protect against heat, ignition sources and direct sunlight.*

### *Requirements for storage areas and containers:*

*Keep container tightly closed.*

*Close open containers with care and store in an upright position to avoid spilling.*

### *Information on fire and explosion protection:*

*Do not store together with ignitable sources, heat and fire.*

### *Storage class:*

*11; Combustible solids (TRGS 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):*

*TRGS 900*

*Barium sulfate: TWA: Average value (8h): 1.25 mg/m<sup>3</sup> (airborne fraction); 10 mg/m<sup>3</sup> (inhalable fraction); Short-term value (15 min): 2.5 mg/m<sup>3</sup> (airborne fraction); 20 mg/m<sup>3</sup> (inhalable fraction)*

#### *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/exhaust system.*

#### *Personal Protection*

#### *General protective measures:*

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

*Respiratory protection:*

*Not required.*

*Hand protection:*

*Chemical protective gloves (EN 374 (Europe), F739 (US)).*

*Protective glove material:*

*The glove material must be sufficiently impermeable and resistant against the product.*

*Eye protection:*

*Safety eyewear should be used when there is a likelihood of exposure (EN 166).*

*Body protection:*

*Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.*

*Environmental precautions:*

*Do not allow entering sewerage system.*

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## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

*Form:* powder

*Color:* black

*Odor:* odorless

*Odor threshold:*

*pH-Value:* 6 - 8 (10%)

*Melting temperature:* 420°C

*Boiling temperature:*

*not applicable*

*Flash point:*

*not applicable*

*Evaporation rate:*

*not determined*

*Flammability (solid, gas):*

*Not a flammable solid according to UN transport regulations division 4.1 and GHS chapter 2.7.*

*Upper explosion limit:*

*no information available*

*Lower explosion limit:*

*no information available*

*Vapor pressure:*

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*Vapor density:*

*not determined*

*Density:*

*1.427 g/cm<sup>3</sup> (20°C)*

*Solubility in water:*

*< 0.002 g/l*

*Auto-ignition temperature:*

*> 400°C (> 752°F)*

*Decomposition temperature:*

*> 315°C*

*Viscosity, dynamic:*

*not applicable*

*Explosive properties:*

*Product does not present an explosion hazard.*

*Oxidizing properties:*

*no information available*

*Bulk density:*

*238 kg/m<sup>3</sup>*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

*Self-heating ability: This product is not a self-heating substance according to the UN class 4.2 (UN Test N.4)*

## 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

*Unknown.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Thermal decomposition:*

*Exposure to high temperatures can form hazardous decomposition products.*

### 10.5. Incompatible Materials

*Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.*

### 10.6. Hazardous Decomposition Products

*None known.*

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### 10.7. Further Information

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## 11. Toxicological Information

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

*Product shows practically no toxicity after a single oral, dermal or inhalative exposure.*

#### Acute Toxicity

*Exposure to airborne concentrations above the legal or recommended limits may cause irritation of the nose, throat and lungs.*

LD50, oral: > 5000 mg/kg (rat, m/f)

LD50, dermal: > 2500 mg/kg (rat)

LC50, inhalation: > 5.2 mg/l (4h, rat m/f)

#### Primary effects

#### Irritant effect on skin:

*Non irritating (rabbit)*

#### Irritant effect on eyes:

*Non-irritating to eyes (rabbit)*

#### Inhalation:

*No information available.*

#### Ingestion:

*No information available*

#### Sensitization:

*Non sensitizing (mouse).*

*Skin sensitizing effects were not observed in animal studies.*

#### Mutagenicity:

*The substance was not mutagenic in bacteria. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition. The substance was not mutagenic in mammalian cell culture.*

#### Reproductive toxicity:

*The results were determined in a Screening test (OECD 421/422). The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The results of animal studies gave no indication of a fertility impairing effect.*

#### Carcinogenicity:

*No data available concerning carcinogenic effects.*

#### Teratogenicity:

*In animal studies the substance did not cause malformations. The results were determined in a Screening test (OECD 421/422). The product has not been tested. The statement has been derived from substances/product of a similar structure or composition.*

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

*Single exposure: no information available.*

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*Repeated exposure: no information available.*

*Aspiration hazard:*

*No information available.*

### 11.2. Information on other Hazards

*Endocrine Disrupting Properties: no information available.*

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## 12. Ecological Information

### 12.1. Aquatic Toxicity

*Not hazardous for aqueous organisms.*

*Fish toxicity:*

*LC50: > 100 mg/l (96h, *Oryzias latipes*; OECD 203)*

*Daphnia toxicity:*

*No information available.*

*Bacteria toxicity:*

*NOEC: > 100 mg/l (0.5h, active sludge)*

*Algae toxicity:*

*EC50: > 0.007 mg/l (7d, *Lemna gibba*)*

*EC50: > 100 mg/l (72h, *Pseudokirchneriella subcapitata*)*

### 12.2. Persistency and Degradability

*0 to 10 % (28 days; 100 mg/l, active sludge; OECD 301F)*

*Colorants are by their nature very stable and are therefore not readily biodegradable under conditions prevailing in surface water or in effluent treatment plants. Poorly biodegradable. Non-biodegradable according to OECD.*

### 12.3. Bioaccumulation

*Not available.*

### 12.4. Mobility

*No information available.*

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

*This substance is not classified as PBT (persistent, bioaccumulative, toxic), nor as vPvB (very persistent, very bioaccumulative).*

### 12.6. Endocrine Disrupting Properties

*No data available.*

### 12.7. Other Adverse Effects

*Water hazard class:*

*1, slightly hazardous*

*Behaviour in sewage systems:*

*No impairment of the biodegradability of active sludge expected when small amounts are discharged in biological sewage plants.*

*Further ecological effects:*

*Do not let product contaminate ground water, waterways or sewage system.*

*AOX Value:*

*Product does not contain any organically bound halogens which*

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*influence the AOX value of discard water.*

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### 13. Disposal Considerations

#### 13.1. Waste Treatment Methods

*Product:*

*Disposal should be avoided or minimized.*

*Dispose of according to official national and local regulations.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

*Non-contaminated and emptied packaging may be taken for reuse.*

*Contaminated packaging must be disposed like the substance.*

*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):*

*not applicable*

*Hazard no.:*

*EmS No.:*

*IATA Class:*

*not applicable*

*Hazard no.:*

#### 14.4. Packaging Group

*ADR/RID:*

*not applicable*

*IMDG:*

*IATA:*

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### 14.5. Environmental Hazards

*no*

### 14.6. Special Precautions for User

*Always transport containers in an upright position to avoid spilling. Take care to inform all involved persons how to handle product in case of accident or spillage (see Sections 6-8).*

### 14.7. Maritime Transport in Bulk according to IMO Instruments

### 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:*

*1, slightly hazardous for water (German Regulation)*

*Local regulations on chemical accidents:*

*Seveso III: does not apply*

*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*

*Technical instructions on air quality:*

*5.2.1.: 100 %*

### 15.2. Chemical Safety Assessment

*A Chemical Safety Assessment is not necessary for this product.*

### 15.3. Further Information

*Regulation (EC) 850/2004 - Persistent Organic Pollutants and amending Directive 79/117/EEC: not regulated / not applicable*

*Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable*

*Listed in the following inventories:*

*TSCA (US), AIC (AUS), DSL (CA), CSCL (JP), KECI (KR), PICCS (PH), NZIoC (NZ), IECSC (CN), TSCI (TW)*

*VOC Content: not applicable*

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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.*