

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

Identification of the Product

Product Name: Furnace Black
Article No.: 47250
Use of the Substance/Preparation: Artists' and Restoration Material

Company

Company: Kremer Pigmente GmbH & Co. KG
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2. Hazard Identification

Hazard designation: No labelling required.

3. Composition/Information on Ingredients

Chemical Characterization: Amorphous carbon black.
Pigment Black 6, C.I. 77266
Hazardous Ingredients: Carbon black
CAS-Nr: 1333-86-4 EINECS-Nr: 215-609-9 EC-Nr:

4. First Aid Measures

After inhalation: Remove person to fresh air. In case of complaints consult a physician.
After skin contact: Wash with soap and rinse with 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: No special measures required.
Information for physician: After swallowing larger amounts of product: give active coal.

5. Fire-Fighting Measures

Suitable extinguishing media: All extinguishing agents suitable.
Unsuitable extinguishing media: Direct water jet.
Protective equipment: Use self-containing breathing apparatus.
Special hazards: In case of fire: formation of carbon oxides, sulfur oxides and organic decomposition products.
Further information: Contaminated extinguishing water and debris should be collected separately; avoid contamination of sewage system.
Contaminated extinguishing water and debris should be disposed of according to local regulations.

6. Accidental Release Measures

Personal precautions: Wear protective clothing.
Environmental precautions: Do not discharge into drains, surface or ground water.

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Methods of cleaning/absorption: Take up mechanically and collect in suitable container for disposal. Avoid dust formation.

7. Handling and Storage*Handling*

Instructions on safe handling: Avoid formation and deposition of dust. Provide adequate ventilation.

Information on fire and explosion protection: Keep away from sources of ignition - do not smoke. Take precautionary measures against static discharges. Carbon monoxide can be formed in closed containers or not well ventilated storage rooms.

Should repair work be necessary in the manufacturing facility (e.g. welding), the area has to be completely free from the product.

Dust explosion class: St1 (VDI 2263); Max. pressure increase: 30-100 bar/s > 1 kJ

Storage

Storage conditions: Store in closed container and keep product dry.

8. Exposure Controls/Personal Protection

Additional information about design of technical systems: Adequate ventilation to control airborne concentrations below the exposure limits.

Components with workplace control parameters (Germany): Carbon black, amorphous, CAS 1333-86-4; EINECS 215-609-9

MAC-Value: 6 mg/m³ (air-borne fraction)

MAC-Value: 15 mg/m³ (inhalable fraction)

Annual average value

MAC-Value: 12 mg/m³ (air-borne fraction)

MAC-Value: 30 mg/m³ (inhalable fraction)

Short-term value (1h)

Personal protective equipment

General protective measures: Avoid contact with skin and avoid inhalation of vapour. Do not eat, drink or smoke while working.

Respiratory protection: Wear protective mask, particle filter P2 (for solid and liquid particles DIN 3181) if dust occurs.

Hand protection: Protective gloves

Protective glove material: Natural rubber (NR), polyvinyl chloride (PVC), nitrile rubber (NBR).

Eye protection: Safety glasses with protective shields (EN 166).

9. Physical and Chemical Properties

Form: powder

Color: black

Odor: odorless

Melting temperature: > 3000°C

Boiling temperature: > 3000°C

Flash point: not applicable

Ignition temperature: > 300°C (DIN 51794)

Lower explosion limit: 50 g/m³ (VDI 22639)

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Upper explosion limit:	not determined
Density:	1.7 - 1.9 g/cm ³ (20°C)
Bulk density:	100 - 220 kg/m ³
Solubility in water:	insoluble
pH-Value:	6 - 9 (50 g/l; 20°C)

10. Stability and Reactivity

Thermal decomposition/Conditions to be avoided:	> 250°C
Hazardous reactions:	None if used according to specifications. Careful: an especially carried out experiment showed that a mixture of industrial carbon black and air can be brought to explode.
Hazardous decomposition products:	In case of fire: formation of carbon oxides, organic products of decomposition and sulfoxides.

11. Toxicological Information*Acute toxicity*

LD50, oral:	> 8000 mg/kg
LD50, inhalation:	0.0011 mg/l (90d; rat) Target organ: lung. Effect: inflammation, hyperplasia, fibrosis. Rat, mouse (2 years). Exposition: Overload Effect). Target organ: lung. Effect: inflammation, fibrosis, tumors.

Primary effects

Irritant effect on skin:	Non irritating (rabbit)
Irritant effect on eyes:	Non-irritating to eyes (rabbit)
Gentotoxicity in vitro:	Ames-Test: negative (DMSO suspension with industrial carbon black). Industrial carbon black cannot be tested in vitro (insoluble inorganic compound). Organic solvent extracts of industrial carbon black may contain traces of polycyclic aromatic hydrocarbon. This can result in negative and positive test results in different in-vitro testing systems.
Cancerogenity:	Oral, rat (2 years; feeding study) Oral, mouse (2 years; feeding study) Dermal, mouse: 12-18 months; Target organ: skin; effect: no tumors. Evaluation: no tumors.
Further toxicological effects:	Epidemiological and clinical studies did not show any significant health hazards in workers exposed to industrial carbon black. No increased risk of cancer observed with workers exposed to industrial carbon black.

12. Ecological Information

Elimination (Persistency and Degradability):	Pigment is not soluble in water and biologically not degradable.
- Fish toxicity:	LC50: > 1000 mg/l (96h, Brachydanio rerio) (OECD 203)

- Daphnia toxicity: EC50: > 5600 mg/l (24h, Daphnia magna) (OECD 202)
- Bacteria toxicity: EC0: > 800 g/l (3h) DEV L3 (TTC-Test)
- Algae toxicity: EC50: > 10000 mg/l (72h, Scenedesmus subspicatus) (OECD 202)

Further information

Water hazard class: 0

13. Disposal Considerations

- 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.
- Waste Code Nr.: The waste code must be determined with the regional disposal service.
- Uncleaned packaging: Clean packaging material can be recycled.
Dispose according to product.

14. Transport Information

- Further information: Not classified as a dangerous good under transport regulations.
Not activated carbon black from a mineral source.
No hazardous goods of classification 4.2.

15. Regulatory Information

- Designation according to EC guidelines: The material is not subject to classification according to EC lists.

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.