

MATERIAL SAFETY DATA SHEET

1. Chemical Identification

Chemical name: Carbon Black

HS code: 2803.0000.00

2. Composition/ Information on Ingredients

Product Identification: Pigment Black 7

Chemical Formula: C

Formula Weight: 12.0121

CAS NO.: 1333-86-4

SUBSTANCE: Inorganic Pigments

3. Hazards Identification

3.1 Most Important Hazards

A black, odorless, insoluble, powder that can burn or smolder at temperatures greater than 572°F (>300°C).

3.2 Product Classification

3.2.1 EU: Not defined as a dangerous substance or preparation according to Council

3.3 Routes of Exposure

Inhalation, Eye, Skin

3.4 Potential Health Effects

3.4.1 Inhalation:

Temporary discomfort to upper respiratory tract may occur due to mechanical irritation when exposures are well above the occupational exposure limit.

3.4.2 Acute Ingestion:

No evidence of adverse effects from available data.

3.4.3 Acute eye:

High dust concentrations may cause mechanical irritation to eye.

3.4.4 Acute skin:

May cause mechanical irritation, soiling, and skin drying.

3.4.5 Sensitization

No cases of sensitization in humans have been reported

3.4.6 Carcinogenicity

Not listed as a carcinogen by NTP, ACGIH, OSHA or the European Union.

4. First Aid measurements

4.1 First aid procedures

4.1.1 Inhalation - Take affected persons into fresh air. - If necessary, restore normal breathing through standard first aid measures.

4.1.2 Skin – Wash with mild soap and water.

4.1.3 Eye - Rinse eyes thoroughly with large volumes of water keeping eyelid open. If symptoms develop, seek medical attention.

4.1.4 Ingestion - Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

4.2 Note to physicians

Treat symptomatically.

5. Fire fighting measures

5.1 Special Exposure Hazards

It may not be obvious that carbon black is burning unless the material is stirred and sparks are apparent. Carbon black that has been on fire should be observed closely for at least 48 hours to ensure no smoldering material is present. Products of combustion include carbon monoxide (CO), carbon dioxide (CO₂), and oxides of sulfur.

6. Accidental release measured

6.1 Personal Precautions

Wear appropriate personal protective equipment and respiratory protection. See Section 8.

6.2 Environmental Precautions

Carbon black poses no significant environmental hazards.

6.3 Methods for Cleaning Up

Small spills should be vacuumed when possible. Dry sweeping is not recommended. A vacuum equipped with HEPA (high efficiency particulate air) filtration is recommended.

If necessary, light water spray will reduce dust for dry sweeping.

7. Handling and storage

7.1 Handling

Avoid dust exposures above the occupational exposure limit

Use local exhaust ventilation or other appropriate engineering controls to maintain exposures below occupational exposure limit. Avoid contact with skin and eyes. If exposed, wash to avoid mechanical irritation and soiling.

7.2 Storage

Store in a dry place away from ignition sources and strong oxidizers.

8. Exposure control/personal protection

8.1 Exposure Limit Values: 3.5 TWA

8.2 Engineering Controls

Use process enclosures and/or exhaust ventilation to keep airborne dust concentrations below the occupational exposure limit.

8.3 Personal Protective Equipment

8.3.1 Respiratory

Approved respirators should be used where airborne concentrations are expected to exceed occupational exposure limits.

8.3.2 Hand Protection

Wash hands and other exposed skin with mild soap. Use of a barrier cream may help to prevent skin drying. General protective gloves may be used to protect hands from carbon black soiling.

8.3.3 Eye Protection

Wear safety glasses or goggles.

8.3.4 Skin Protection

Wear general protective clothing to minimize skin contact. Work clothes should

NOT be taken home and should be washed daily.

8.3.5 General Hygiene Considerations

Emergency eyewash and safety shower should be in close proximity. Wash hands and face thoroughly with mild soap before eating and drinking.

9. Physical and chemical properties

9.1 Appearance: powder or beads

9.2 Color: black

9.3 Odor odorless

9.4 Odor threshold: not applicable

9.5 Melting point/range not applicable

9.6 Boiling point/range not applicable

9.7 Vapor pressure not applicable

9.8 Evaporation rate not applicable

9.9 Density: (20°C) 1.7 – 1.9 g/ml

9.10 Bulk density: beads 630-680 kg/m³

Powder (fluffy) 250-380 kg/m³

9.11 Solubility (in Water): insoluble

9.12 pH value: acid or basic

9.13 Partition coefficient (n-octanol/water): not applicable

10. Stability and reactivity

Stability: stable under normal ambient conditions

Conditions to avoid: prevent exposure to high temperatures >572°F (>300°C) and open flames.

Materials to avoid: strong oxidizers such as chlorates, bromates, and nitrates.

Hazardous polymerization: Will not occur.

11. Toxicological information

Acute toxicity: not applicable

Primary skin irritation:

rabbit: non-irritative

Primary eye irritation:

rabbit: non-irritative

12. Ecological information

Aquatic toxicity: not applicable

13. Disposal Information

Product can be burned in suitable incineration plants or disposed of in a suitable landfill in accordance with the regulations issued by the appropriate federal, provincial, state and local authorities.

14. Transport information

Carbon black is not restricted for transport by the following regulations:

International Air Transport Association (IATA)

Note: listed as "carbon black, non-activated, mineral origin"

International Civil Air Organization-Technical Instructions (ICAO-TI)

Note: listed as "carbon black, non-activated, mineral origin"

International Maritime Dangerous Goods Code (IMDG)

Note: listed as "carbon black, non-activated, mineral origin"

15. Regulatory information

Not Applicable

16. Other information

The information contained herein is based on the present state of our knowledge. All data given are in good faith but no warranty, expressed or implied, is made.