HAZARD MATERIAL IDENTIFICATION SYSTEM

Health Hazard 0 - Minimal  
Flammability Hazard 1 - Slight  
Reactivity Hazard 0 - Minimal  
Personal Protection E - Glasses, Gloves, Dust Resp

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: Black Iron Oxide  
Description: Black Iron Oxide, C.I. Pigment Black 11, C.I. No. 77499  
Other Designations: BK4799, BK5000, BK5099, BK5599, BK5799  
CAS: 1317-61-9 (may also be described as CAS # 12227-89-3)  
Chemical Name: Fe₃O₄

MANUFACTURER: Elementis Pigments Inc.  
PHONE: 618-271-4700  
11 Executive Dr., Suite 1  
E. St. Louis Plant  
Fairview Heights, IL 62208

SECTION II. INGREDIENTS AND HAZARDS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS NUMBER</th>
<th>PERCENT</th>
<th>EXPOSURE LIMITS(1)</th>
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</thead>
<tbody>
<tr>
<td>Iron Oxide Black</td>
<td>1317-61-9</td>
<td>&gt;99%</td>
<td>OSHA PEL: 15 mg/M³ TWA</td>
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<td>ACGIH TLV: 10 mg/M³ TWA</td>
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(1) Nuisance dust

(Ingredients and Hazards continued on next page)
SARA TITLE III: Section 313 Supplier Notification

This product does not contain toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

SECTION III: PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Black Powder, No Odor

Solubility in Water (%): Insoluble
Specific Gravity (H₂O=1): 4.8 – 5.1
% Volatile by Volume: 0

SECTION IV: FIRE AND EXPLOSION DATA

Flashing Point(method): Not flammable, but may be subject to slow oxidation if stored at temperatures above 140°F.

Extinguishing Media: Not flammable. Use appropriate extinguishing media for the combustible material involved in the fire. If oxidation should occur, heat will be liberated which could cause surrounding combustibles to burn. If oxidation starts, the pallet should be broken apart and cooled with water and dissipate the heat.

Unusual Fire or Explosion Hazards: Storage at temperatures above 140°F may cause the black iron oxide to oxidize, generating heat which could cause surrounding combustibles to burn.

Special Firefighting Procedures: Firefighters should wear self-contained breathing apparatus.

SECTION V: REACTIVITY DATA

Material is not stable if stored at temperatures above 140°F. Hazardous polymerization will not occur

Chemical incompatibilities: It is incompatible with strong oxidizing agents.

Conditions to avoid: Storage above 140°F.

Hazardous Decomposition Products: None
SECTION VI. HEALTH HAZARD DATA

This product is not considered a carcinogen by IARC, NTP, ACGIH or OSHA

Summary of Health Risks and Symptoms of Exposure: May cause mechanical skin and eye irritation. Repeated and prolonged exposures to iron oxide dust may cause a benign pneumoconiosis called siderosis

Principal Routes of Entry: Inhalation, ingestion

Acute Effects: Causes mechanical skin and eye irritation

Chronic Health Effect(s): Prolonged inhalation of iron oxide dust is known to produce a condition known as siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis producing materials such as silica. The TLV is set to protect against siderosis.

Emergency and First Aid Procedures:

Eye Contact: Flush eyes with generous amounts of water for at least 15 minutes. Call a physician if irritation persists.

Skin Contact: Wash dust from skin with mild soap and water.

Inhalation: Remove to fresh air. Call a physician.

Ingestion: If conscious, give large quantities of water to induce vomiting. Get medical attention.

SECTION VII. PRECAUTIONS FOR SAFE HANDLING, USE OR DISPOSAL

Spill / Leak procedures: Vacuum or use wet clean-up techniques and place waste material in closed container.

Waste management / disposal: Disposal must be made in accordance with Federal, State and local regulations. Pursuant to 40 CFR part 261 of the Resource Conservation & Recovery Act (RCRA), CERCLA or DOT Regulations currently in effect, discarded Carbon Black would not be classified as a hazardous waste.

Precautions to be taken in handling and storing: For transportation emergencies, call CHEMTREC, 24 hour information service, (800) 424-9300.
SECTION VIII.  SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Goggles:  Safety glasses or dust-tight goggles

Gloves:  Leather or rubber gloves.

Respirator:  Use of NIOSH approved dust respirator is recommended when exposure limits may be exceeded.

Workplace Considerations:

Ventilation:  Local exhaust ventilation to collector or containment recommended to control dust to below exposure limits.

Safety Stations:  An eye wash station should be available to the area of use.

Other:  In accordance with good industrial hygiene practice, avoid contact with skins, eyes or clothing.  Avoid breathing dust.  Keep container closed when not in use.  Use with adequate, localized ventilation.  Wash thoroughly after handling and before eating, drinking or using tobacco products.

SECTION IX.  SPECIAL PRECAUTIONS

DOT Class:  Not regulated

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