

**MATERIAL SAFETY DATA SHEET**  
**3460 BLACK IRON OXIDE**

Product/Material: 3460 Black Iron Oxide  
Supplier: Ceramic Color & Chemicals Mfg. Co.  
Address: 13<sup>th</sup> Street & 11<sup>th</sup> Avenue, New Brighton, PA 15066  
Emergency Tel. No.: (724) 846-4000

**SECTION I – Product Identification**

Trade Name: 3460 Black Iron Oxide  
Synonym: Iron Oxide, Magnetite  
Chemical Family: Metal Oxide  
Formula: Fe<sub>3</sub>O<sub>4</sub>  
C.I. Pigment Black 11, C.I. No. 77499  
CAS Number: 1317-61-9  
HMIS: H0 F1 R1

**SECTION II – Hazardous Ingredients**

Black Iron Oxide - May ignite combustible materials with which it contacts if stored at temperatures above 140° F.

**SECTION III – Physical Data**

Boiling Point (°F): Not Applicable  
Vapor Pressure (mm Hg): Not Applicable  
Vapor Density: Not Applicable  
Solubility in Water: Insoluble  
Specific Gravity (H<sub>2</sub>O=1): 4.8 – 5.1  
Percent Volatile by Weight: 0  
Evaporation Rate: 0  
Appearance and Odor: Black Powder, No Odor

**SECTION IV – Fire and Explosion Hazard Data**

Flash Point (Method Used) Non-flammable  
Flammable Limits: LEL - Non-flammable  
UEL - Non-flammable  
Extinguishing Media: Water  
Special Fire Fighting Procedures: None  
Unusual Fire and Explosion Hazards: Black Iron Oxide (Fe<sub>3</sub>O<sub>4</sub>) may be subject to slow oxidation if stored at temperatures above 140° F.

**SECTION V – Health Hazard Data**

Threshold Limit Values: Inert or Nuisance dust –  
5 mg/M<sup>3</sup> respirable (ACGIH & OSHA)  
10 mg/M<sup>3</sup> total dust (ACGIH)  
15 mg/M<sup>3</sup> total dust (OSHA)  
Effects of Overexposure: May cause mechanical irritation to eyes and respiratory tract.

Emergency and First Aid Procedures: Wash dust from skin with soap and water. Flush out eyes with generous amounts of water for at least 15 minutes. See a Physician.

**SECTION VI – Reactivity Data**

Product is unstable. Do not store at temperatures above 140° F. Small amounts of Fe<sub>3</sub>O<sub>4</sub> may oxidize and ignite container.

Incompatibility: Strong oxidizing agents.

Hazardous Decomposition Products: None

Hazardous Polymerization will not occur.

**SECTION VII – Spill or Leak Procedures**

Steps to be Taken in Case Material is Released or Spilled: Normal clean-up procedures. Care should be taken to avoid causing dust to become airborne. Vacuum cleaning systems are recommended.

Waste Disposal Method: 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) Regulations currently in effect, discarded iron oxide would not be classified as a hazardous waste.

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**SECTION VIII – Special Protection Information**

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Eye Protection (Use Most Appropriate): Safety Glasses, Goggles, Face Shield.

Skin Protection: Leather or rubber gloves.

Respiratory Protection: Use of dust respirator is recommended when exposure limits may be exceeded.

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

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**SECTION IX – SPECIAL PRECAUTIONS**

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Good industrial hygiene practice requires that employee exposure be maintained below the recommended TLV. This is preferably achieved through the Provision of adequate ventilation where necessary. Where dust cannot be controlled in this way, personal respiratory protection should be employed.

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Revision date: 7/00

NOTICE: The data and recommendations presented herein are based upon data which is considered to be accurate. However, CCC makes no Guarantee or warranty, either expressed or implied, of the accuracy or completeness of these data and recommendations.