



## SAFETY DATA SHEET

### Black Iron Oxide (Goup III)

#### 1. Identification

##### Product identifier

**Product name** Black Iron Oxide (Goup III)

**Product number** XB5599, XB5799

##### Recommended use of the chemical and restrictions on use

**Application** Industrial color

##### Details of the supplier of the safety data sheet

**Supplier** Huntsman Pigments Americas LLC  
P.O. Box 4980  
The Woodlands, TX 77387  
+1 301 210 3400 / +1 323 269 7311  
MSDS@huntsman.com

##### Emergency telephone number

**Emergency telephone** CHEMTREC: (800) 424-9300 (Contract number: 191118)

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Self-heat. 2 - H252

**Health hazards** Not Classified

**Environmental hazards** Not Classified

##### Label elements

##### Pictogram



**Signal word** Warning

**Hazard statements** H252 Self-heating in large quantities; may catch fire.

**Precautionary statements** P235+P410 Keep cool. Protect from sunlight.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P407 Maintain air gap between stacks/pallets.  
P413 Store bulk masses greater than kg/lbs at temperatures not exceeding °C/°F.  
P420 Store away from other materials.

##### Other hazards

NOT CLASSIFIED Self-heating in packages up to 450 liters capacity.

## Black Iron Oxide (Goup III)

### 3. Composition/information on ingredients

#### Mixtures

<b>C.I. Pigment Black 11 (Group III)</b>	<b>&gt; 85%</b>
CAS number: 1317-61-9	REACH registration number: Proprietary

**Classification**  
Self-heat. 2 - H252

<b>CALCIUM CARBONATE</b>	<b>&lt; 15%</b>
CAS number: 1317-65-3	REACH registration number: Proprietary

**Classification**  
Not Classified

The Full Text for all Hazard Statements are Displayed in Section 16.

**Composition comments**      Black Iron Oxide, Fe<sub>3</sub>O<sub>4</sub> / C.I. Pigment Black 11 : Alternative CAS No. 12227-89-3,  
Alternative EINECS No. 235-442-5

### 4. First-aid measures

#### Description of first aid measures

<b>Inhalation</b>	If exposed to excessive levels of dust or fumes, remove to fresh air. Get medical attention if cough or other symptoms develop.
<b>Ingestion</b>	Rinse mouth thoroughly with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed by medical personnel. Get medical attention if symptoms occur.
<b>Skin Contact</b>	Wash with soap and water. Get medical attention if irritation develops or persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if any discomfort continues.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**    The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Extinguish with the following media: Water spray, foam, dry powder or carbon dioxide.

#### Special hazards arising from the substance or mixture

**Flammability Class**                No Uniform Fire Code noted.

**Specific hazards**                    Exposure to heat greater than 55C (130F) may cause this product to oxidize which can generate more heat. This heat may be sufficient to cause the product packaging or nearby combustible materials to ignite. The product may be quenched with water to stop the oxidation.

#### Advice for firefighters

**Special protective equipment for firefighters**    Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

### 6. Accidental release measures

#### Methods and material for containment and cleaning up

## Black Iron Oxide (Goup III)

**Methods for cleaning up** If dust is generated, use appropriate respiratory protection. Vacuum or sweep up material and place in a disposal container. Avoid generation and spreading of dust. Large Spillages: Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Avoid runoff into storm sewers and ditches which lead to waterways.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Wash contaminated skin thoroughly after handling.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store at temperatures not exceeding 55°C/130°F. Store dry at ambient temperature away from food and beverages, excessive heat or flame sources (furnace, kilns, boilers etc.). Store away from substances subject to catalytic decomposition by dust, e.g. peroxides

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

Although no exposure limit has been established by OSHA for this product, the limit for nuisance particulates should be followed: OSHA 8-hr TWA 10mg/m<sup>3</sup> Total Dust 5 mg/m<sup>3</sup> respirable dust. ACGIH TLV-TWA 10mg/m<sup>3</sup> Total dust or 5mg/m<sup>3</sup> respirable dust.

**Ingredient comments** Although no exposure limit has been established by OSHA for this product, the limit for nuisance particulates should be followed: OSHA 8-hr TWA 10mg/m<sup>3</sup> Total Dust 5 mg/m<sup>3</sup> respirable dust. ACGIH TLV-TWA 10mg/m<sup>3</sup> Total dust or 5mg/m<sup>3</sup> respirable dust.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Dusty powder.
<b>Color</b>	Black.
<b>Odor</b>	Odorless.
<b>pH</b>	pH (diluted solution): 6-10 @ 10% suspension
<b>Melting point</b>	> 1000 deg C / 1832 deg F
<b>Solubility(ies)</b>	Insoluble in water.
<b>Decomposition Temperature</b>	> 55°C
<b>Volatile organic compound</b>	None.

### 10. Stability and reactivity

**Stability** Exposure to heat greater than 55C (130F) can cause this product to slowly auto-oxidize, which generates additional heat. Under certain circumstances, this heat may be sufficient to cause the bag or combustible materials stored nearby to ignite. Once oxidized, the material will be a brown ferric oxide (Fe<sub>2</sub>O<sub>3</sub>).

## Black Iron Oxide (Goup III)

**Materials to avoid** Substances subject to catalytic decomposition caused by dust such as peroxides. Further avoid contact with aluminum dust, calcium hypochlorite, hydrazine, ethylene oxide, caesium carbide.

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** From literature surveys undertaken re Iron oxides:  
LD50: > 5000 mg/kg, oral, rat  
Eyes: Non-irritant, rabbit  
Skin (24 hrs): Non-irritant, rabbit

**Other health effects** This substance is not classifiable as a human carcinogen.

**Inhalation** Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

**Ingestion** No harmful effects expected from quantities likely to be ingested by accident.

**Skin Contact** Substance may cause slight skin irritation.

**Eye contact** May cause slight irritation.

### 12. Ecological Information

**Ecotoxicity** The product is not expected to be hazardous to the environment.

#### Persistence and degradability

**Persistence and degradability** The product is not readily biodegradable.

#### Bioaccumulative potential

**Bio-Accumulative Potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

#### Mobility in soil

**Mobility** The product is insoluble in water.

#### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### Other adverse effects

**Other adverse effects** None known.

### 13. Disposal considerations

#### Waste treatment methods

**General information** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

### 14. Transport information

**General** This product is NOT REGULATED when the individual package size is less than 450 liters in volume. OTHERWISE, this product is regulated as follows:

#### UN Number

**UN No. (DOT)** 3190

**Black Iron Oxide (Goup III)**

UN No. (IMDG) 3190

UN No. (ICAO) 3190

**UN proper shipping name****Proper shipping name (DOT)** SELF-HEATING SOLID, INORGANIC, N.O.S.**Proper shipping name (IMDG)** SELF-HEATING SOLID, INORGANIC, N.O.S.**Proper shipping name (ICAO)** SELF-HEATING SOLID, INORGANIC, N.O.S.**Transport hazard class(es)**

DOT hazard class 4.2

DOT hazard label Spontaneously Combustible

TDG class 4.2

TDG label 4.2

IMDG Class 4.2

IMDG subsidiary risk

ICAO class/division 4.2

ICAO subsidiary risk

**Transport labels****Packing group**

DOT pack group III

IMDG packing group III

ICAO packing group III

**Special precautions for user**

EmS F-A, S-J

**15. Regulatory information****US Federal Regulations****SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are listed or exempt.

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

None of the ingredients are listed or exempt.

**SARA 313 Emission Reporting**

None of the ingredients are listed or exempt.

**CAA Accidental Release Prevention**

None of the ingredients are listed or exempt.

**US State Regulations**

## Black Iron Oxide (Goup III)

**State Regulations Comments** California Prop 65 Warning: This product contains chemicals, as trace impurities and not intentionally added, known to the state of California to cause cancer (C) and birth defects or other reproductive (R) harm.

### California Proposition 65 Carcinogens and Reproductive Toxins

**CRYSTALLINE SILICA**

Known to the State of California to cause cancer.

### Massachusetts "Right To Know" List

**C.I. Pigment Black 11 (Group III)**

Not listed.

**CALCIUM CARBONATE**

Yes.

### Rhode Island "Right To Know" List

**C.I. Pigment Black 11 (Group III)**

Not listed.

**CALCIUM CARBONATE**

Yes.

### Minnesota "Right To Know" List

**C.I. Pigment Black 11 (Group III)**

Not listed.

**CALCIUM CARBONATE**

Yes.

### New Jersey "Right To Know" List

**C.I. Pigment Black 11 (Group III)**

Not listed.

**CALCIUM CARBONATE**

Yes.

### Pennsylvania "Right To Know" List

**C.I. Pigment Black 11 (Group III)**

Not listed.

**CALCIUM CARBONATE**

Yes.

### Inventories

#### EU - EINECS/ELINCS

EINECS

All the ingredients are listed or exempt.

#### Canada - DSL/NDSL

**C.I. Pigment Black 11 (Group III)**

DSL

**CALCIUM CARBONATE**

Non Domestic Substance List

#### US - TSCA

## Black Iron Oxide (Goup III)

All the ingredients are listed or exempt.

### US - TSCA 12(b) Export Notification

No.

### Australia - AICS

All the ingredients are listed or exempt.

### Japan - MITI

#### C.I. Pigment Black 11 (Group III)

Yes.

#### CALCIUM CARBONATE

No.

### Korea - KECI

All the ingredients are listed or exempt.

### China - IECSC

All the ingredients are listed or exempt.

### Philippines – PICCS

All the ingredients are listed or exempt.

### New Zealand - NZIOC

All the ingredients are listed or exempt.

## 16. Other information

<b>Revision date</b>	4/21/2015
<b>Supersedes date</b>	1/14/2014
<b>SDS No.</b>	21092
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H252 Self-heating in large quantities; may catch fire.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.