



# Syn-Ox® HB-1094

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 02/09/2015 Date of issue: 02/09/2015

Version: 1.0

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Syn-Ox HB-1094

**Synonyms:** Synthetic Black Iron Oxide

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Inorganic pigment used as a colorant for industrial, commercial, and consumer applications.

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Hoover Color Corporation

2170 Julia Simpkins Road

P.O. Box 218

Hiwassee, VA 24347

540-980-7233

[www.hoovercolor.com](http://www.hoovercolor.com)

### 1.4. Emergency Telephone Number

**Emergency Number** : 800-424-9300 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Not classified

### 2.2. Label Elements

#### GHS-US Labeling

No labeling applicable

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Black Iron oxide (Fe <sub>3</sub> O <sub>4</sub> )	(CAS No) 12227-89-3	99	Not classified
Water	(CAS No) 7732-18-5	1	Not classified

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures After Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. Obtain medical attention if there is persistent irritation.

**First-aid Measures After Ingestion:** Do not induce vomiting. Rinse mouth. Seek medical attention if any problems arise.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Obtain medical attention if there is persistent irritation.

# Syn-Ox® HB-1094

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Symptoms/Injuries After Ingestion:** Ingestion is not likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Refer to Section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid breathing dust.

##### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Use safe, appropriate practices.

##### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop spill if safe to do so. Eliminate ignition sources. Ventilate area.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

#### 7.3. Specific End Use(s)

Inorganic pigment used as a colorant for industrial, commercial, and consumer applications.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

Inert or Nuisance Dust		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> Respirable Fraction 10 mg/m <sup>3</sup> Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> Respirable Fraction 15 mg/m <sup>3</sup> Total Dust
Water (7732-18-5)		
USA ACGIH	TLV	Not applicable
USA OSHA	PEL	Not applicable

# Syn-Ox<sup>®</sup> HB-1094

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

USA NIOSH	REL	Not applicable
USA NIOSH	IDLH	Not applicable

## 8.2. Exposure Controls

### Appropriate Engineering Controls

: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

### Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



### Materials for Protective Clothing

: Suitable materials with adequate ventilation.

### Hand Protection

: Wear protective gloves.

### Eye Protection

: Safety glasses with side shields, or goggles, are recommended.

### Skin and Body Protection

: Wear suitable protective clothing.

### Respiratory Protection

: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

### Environmental Exposure Controls

: Do not allow the product to be released into the environment.

### Consumer Exposure Controls

: Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Black powder
Odor	: None
Odor Threshold	: No data available
pH	: 8
Evaporation Rate	: No data available
Melting Point	: > 1000 °C (1832 °F)
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 5.0
Tap Density	: 1.0 g/cc
Solubility	: Insoluble
Partition Coefficient: N-octanol/water	: No data available
Viscosity	: No data available

### 9.2. Other Information

VOC content : 0 %

## SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.

10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

# Syn-Ox<sup>®</sup> HB-1094

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**10.4. Conditions to Avoid:** Direct sunlight. Material may oxidize at temperatures above 300°F/150° C, and convert to Fe<sub>2</sub>O<sub>3</sub>. This oxidation generates heat and may be sufficient enough to cause the bag to ignite. Extremely low temperatures. Ignition sources. Incompatible materials.

**10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**10.6. Hazardous Decomposition Products:** Not available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects

**Acute Toxicity:** Not classified

**Black Iron oxide (Fe<sub>3</sub>O<sub>4</sub>) (12227-89-3)**

<b>LD50 Oral Rat</b>	> 5,000 mg/kg
----------------------	---------------

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Obtain medical attention if there is persistent irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is not likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

**12.2. Persistence and Degradability** No additional information available

**12.3. Bioaccumulative Potential** Not expected to be bio-accumulating

**12.4. Mobility in Soil** No additional information available

**12.5. Other Adverse Effects**

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

**Black Iron oxide (Fe<sub>3</sub>O<sub>4</sub>) (12227-89-3)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Water (7732-18-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

# Syn-Ox<sup>®</sup> HB-1094

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 15.2 US State Regulations

### Black Iron oxide (Fe<sub>3</sub>O<sub>4</sub>) (12227-89-3)

U.S. - Massachusetts – Listed  
U.S. - New Jersey – Listed  
U.S. - Pennsylvania – Listed

International:

COUNTRY	CHEMICAL INVENTORY	STATUS
Europe	EINECS	235-442-5
Canada	DSL	Listed
China	IECSC	Listed
Japan	METI	Listed
Australia	AICS	Listed
Korea	KECL	Listed
New Zealand	NZIoC	Listed
Philippines	PICCS	Listed

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 02/09/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

**HMIS III Rating**

**Health** : 1 Slight Hazard - Irritation or minor reversible injury possible

**Flammability** : 0 Minimal Hazard

**Physical** : 0 Minimal Hazard

**Personal Protection** : E (glasses, gloves, dust respirator)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)