
4. FIRE AND EXPLOSION DATA -

Flash Point °F(°C) : Not Applicable

Flammable Limits : Lel - Not Applicable

Uel - Not Applicable

Extinguishing Media: Material is not combustible. Use extinguishing agents that are suitable to the surrounding fire.

Special Fire Fighting Procedures/Unusual Fire or Explosion Hazards: None

5. HUMAN HEALTH DATA -

Primary Route(s) of Exposure: Eye Contact; Skin Contact; Inhalation

Human Effects and Symptoms Of Overexposure:

Acute : On the basis of Animal Toxicity Data (see Section XII), we would expect this product to be non-irritating to the eyes and skin and essentially non-toxic by ingestion. However, excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits in the eyes, ears and nose. Injury to the skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.

Chronic: None Known

Other : Prolonged inhalation (6 to 10 years) of iron oxide fume has been reported to produce changes in lung x-rays of exposed individuals. This condition, siderosis, is considered to be a benign pneumoconiosis that exhibits no adverse health effects. Siderosis has been observed among occupations such as arc-welders where iron oxide fumes are present. To the best of our knowledge, this condition has not been observed after prolonged exposure to iron oxide pigments.

Medical Conditions Aggravated by Exposure: None Known

Carcinogenicity:

NTP : Not Listed

IARC : Not Listed

OSHA : Not Listed

Other : IARC and NTP both contain listings for underground hematite mining. These listings are for the occupational exposures associated with the mining process which include radon, a known lung carcinogen. NIOSH in the Registry of Toxic Effects of Chemical Substances (RTECS) lists iron oxide as a suspect human carcinogen. However, the IARC reference to underground hematite mining is the source for this classification. Based on information currently available, this product is not considered a carcinogen.

6. EMERGENCY & FIRST AID PROCEDURES -

- Eye Contact** : Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists.
- Skin Contact** : Wash with soap and water.
- Inhalation** : Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- Ingestion** : Immediately contact a physician.
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7. EMPLOYEE PROTECTION RECOMMENDATIONS -

- Eye Protection** : Safety glasses
- Skin Protection**: Rubber, cloth or plastic gloves if appropriate for job conditions.
- Respiratory Protection** : Work ambient concentrations should be monitored and if the recommended exposure limit is exceeded, a NIOSH/MSHA approved dust respirator should be worn. (Do not exceed use limits of the respirator.)
- Ventilation** : Use local ventilation to maintain air levels below the recommended exposure limit if dusting is a problem.
- Other** : Eye wash stations and washing facilities should be available. Employees should wash their hands and face before eating, drinking or using tobacco products.
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8. REACTIVITY DATA -

- Stability**.....: This is a stable material.
- Polymerization**.....: Will not occur.
- Incompatibilities**.....: None Known
- Instability Conditions**.....: None Known
- Decomposition Temperature**...: Not Established.
- Decomposition Products**.....: None known.
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9. SPILL OR LEAK PROCEDURES -

- Steps to be taken in case material is released or spilled**: Vacuum or scoop material into an appropriately marked container for reclamation or disposal. Avoid excessive generation of dust. If dust is generated, use appropriate respiratory protection.
- Waste disposal method**: Material which cannot be recycled into your process should be landfilled in accordance with federal, state and local environmental control regulations.
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10. SPECIAL PRECAUTIONS & STORAGE DATA -

Storage Temperature (Min/Max): Ambient/Ambient
 Average Shelf Life.....: Unlimited
 Special Sensitivity.....: None Known
 (Heat;Light;Moisture).....:
 Handling and Storing.....: Store dry at ambient temperature away from food and beverages. Avoid breathing dust. Avoid contact with eyes and skin. Wash thoroughly after handling.

Bags on pallets, shrink wrapped in polyethylene: The removal of the polyethylene foil may cause an electrostatic charge; therefore the removal should not be carried out in the vicinity of inflammable vapours.

11. SHIPPING INFORMATION -

DOT
 D.O.T. Shipping Name.....: None
 Technical Shipping Name...: Inorganic Oxide
 D.O.T. Hazard Class.....: Non-regulated
 U.N./N.A. Number.....: None
 Product RQ (lbs.).....: None
 D.O.T. Label.....: Non-regulated
 D.O.T. Placard.....: Non-regulated
 Freight Class Package.....: Iron Oxide, NOI
 Product Label.....: General Purpose Label

IMO / UNDG CODE

Proper Shipping Name.....: None
 Hazard Class Division No.: Non-regulated

ICAO / IATA

Proper Shipping Name.....: None
 Hazard Class Division No.: Non-regulated

12. ANIMAL TOXICITY DATA -**ACUTE TOXICITY -**

Oral LD50.....: Greater than 5000 mg/kg (Rat). (1)
 Dermal LD50.....: Data not established for product.
 Inhalation LC50.....: Data not established for product.
 Eye Effects.....: Non-irritating to rabbit eyes. (1)
 Skin Effects.....: Non-irritating to rabbit skin (24 hrs). (1)
 Sensitization.....: Data not established for product.
 Chronic Toxicity.....: Data not established for product.
 Aquatic Toxicity Data: LCo: Greater than 1000 mg/l Golden orfe (Leuciscus idus). (1)

1 Toxicological tests performed on chemically identical products.

USER STATUS..... This product is non-hazardous under the
 criteria of the Federal OSHA Hazard
 Communication Standard 29 CFR 1910.1200.
TSCA STATUS..... On TSCA Inventory.
CERCLA REPORTABLE QUANTITY: None
SARA TITLE III:
SECTION 302 EXTREMELY
HAZARDOUS SUBSTANCES...: None
SECTION 311/312
HAZARD CATEGORIES.....: Non-hazardous under Section 311/312
SECTION 313
TOXIC CHEMICALS.....: None
RCRA STATUS.....: If discarded in its purchased form, this
 product would not be a hazardous waste
 either by listing or by characteristic.
 However, under RCRA, it is the responsi-
 bility of the product user to determine
 at the time of disposal, whether a
 material containing the product or
 derived from the product should be
 classified as a hazardous waste.. (40 CFR
 261.20-24)

OTHER REGULATORY INFORMATION

The following chemicals are specifically listed by individual states; other product specific health and safety data, in other sections of the MSDS, may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

| <u>COMPONENT NAME/CAS NUMBER</u> | <u>CONCENTRATION</u> | <u>STATE CODE</u> |
|--|----------------------|-------------------|
| Iron (III) Oxide (C.I. Pigment Red 101) 1309-37-1 | Essentially 100% | PA1, NJ4, CN1 |
| Arsenic 7440-38-2 | <100 ppm* | CA, MA |
| Cadmium 7440-43-9 | < 5 ppm* | CA, MA |
| Mercury 7439-97-6 | < 1 ppm* | CA |
| Nickel 7440-02-0 | < 400 ppm* | CA, MA |
| Lead 7439-92-1 | <100 ppm* | CA |

CA = California Proposition 65
MA = Massachusetts Hazardous Substance List
NJ1 = New Jersey Hazardous Substance List
NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%
PA1 = Pennsylvania Hazardous Substance List
PA3 = Pennsylvania Non-hazardous present at 3% or greater.
CN1 = Canada WHMIS Ingredient Disclosure List over 1%.

* Please note that these were random sample analyses and content may vary from batch to batch.

HMIS RATINGS: Health Flammability Reactivity
 0 0 0
 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Laporte Pigments method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS ratings are provided by Laporte Pigments as a customer service.

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