# Nature's Reflections

# Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name:

RED IRON OXIDE

Hazardous Material
Health

Health 0
Fire Hazard 0
Physical Hazard 0
Personal Protection X

Product Code: MMFG/RED IRON OXIDE Chemical Name: Inorganic Metal Oxide

Chemical Formula: Fe2O3\*H2O

Color Index: Pigment Red CAS Number: 1309-37-1

NIOSH/RTECS NUMBER:N07400000

Effective Date: May 26, 2010

Manufacturer Information: Nature's Reflections

699 SE Battle Drive Madison, FL 32340

Telephone: 850.973.4148

Section 2. Hazard Identification

Ingredients

**Occupational Exposure Limits** 

Component	CAS Number	OSHA PEL	ACGIH TLV	Weight Percent
Iron Oxide Red*	1309-37-1	Not Established	Not Established	99-100%
Silicon Dioxide	7631-86-9	6 ppm (Iron Oxide Fume as Fe)	10mg/m3 (Iron Oxide dust & fume)	<1%

<sup>\*\*\*</sup>No reportable quantities of toxic chemical(s) subject to the reporting requirements of Section 313 of SARA Title III and of 40 CFR 372 are present\*\*\*

**Emergency Overview**: May cause respiratory tract, eye, and skin irritation.

#### **Potential Acute Health Effects:**

*Eyes*: Non irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and cause unpleasant deposits.

*Skin*: Will not irritate skin and is not likely to cause an allergic skin reaction. Irritation to skin or mucous membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for the removal of dust.

*Inhalation*: Not a hazard in normal industrial use. Wear respirator and avoid breathing dust. As with all dusty materials, inhalation may cause respiratory irritation sneezing, coughing and runny nose.

*Ingestion*: Not an intended route of exposure. However if a large amount is ingested, may upset the gastrointestinal tract and cause diarrhea.

### Section 3. Composition/Information on Ingredients

**EMERGENCY OVERVIEW:** NO UNUSUAL FIRE OR SPILL HAZARD. LOW HEALTH RISK BY INHALATION.

POTENTIAL HEALTH EFFECTS: EYES - MAY CAUSE MECHANICAL IRRITATION.

**SKIN - NONE** 

**INHALATION -** LOW HEALTH RISK BY INHALATION. TREAT AS A NUISANCE DUST.

ORAL LD50 - GREATER THAN 10 g/kg (RAT)

**EFFECTS OF OVEREXPOSURE:** 

**ACUTE - CAUSES MECHANICAL SKIN AND EYE IRRITATION.** 

**CHRONIC -** 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 OR DISABILITY UNLESS THERE IS CONCURRENT EXPOSURE

TO OTHER FIBROSIS- PRODUCING MATERIALS SUCH AS SILICA. THE TLV IS SET TO PROTECT AGAINST SIDEROSIS.

CARCINOGENICITY: NOT LISTED WITH NTP, IARC, OR OSHA AS A KNOWN OR SUSPECTED

Section 4. First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes. Prolonged or repeated

contact may result in mechanical irritation.

Skin Contact: Wash with soap and water.

**Inhalation:** Move to fresh air. Seek medical attention if irritation persists.

**Ingestion:** Seek medical attention. **Flash Point**: Flammability of  $> 212^{\circ}$  F

Section 5. Fire Fighting Measures

FLAMMABLE PROPERTIES FLASH POINT - NONE

FLAMMABLE LIMITS - NOT APPLICABLE

AUTO-IGNITION TEMPERATURE - NOT APPLICABLE

**HAZARDOUS COMBUSTION PRODUCTS:**NONE

**EXTINGUISHING MEDIA:** USE EXTINGUISHING AGENT APPLICABLE TO SURROUNDING FIRE. **FIRE FIGHTING INSTRUCTIONS:** FIRE FIGHTERS SHOULD WEAR NIOSH APPROVED, POSITIVE PRESSURE, SELFCONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING WHEN APPROPRIATE.

Section 6. Accidental Release Measures

Clean-Up: CLEAN UP USING DRY PROCEDURES; AVOID DUSTING.

Procedures: Placed in properly labeled and closed container. Dispose of collected material

according to federal, state, and local regulations.

Spills and Leaks: Contain the spill or leak to prevent a discharges to surface streams or

storm sewers. This material is a concentrated dye/pigment. Small quantities in contaminated water solutions will color large volumes.

Section 7. Handling and Storage

**Handling:** GOOD INDUSTRIAL HYGIENE PRACTICE REQUIRES THAT EMPLOYEE EXPOSURE BE

MAINTAINED BELOW 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.

**Storage:** STORE IN A CLEAN, DRY AREA AT AMBIENT TEMPERATURE IN ORIGINAL UNOPENED

CONTAINERS. CONDITIONS OF HIGH HUMIDITY MAY REQUIRE STORAGE IN A CONTROLLED

ENVIRONMENT..

Section 8. Exposure Control/Personal Protection

**Engineering controls**: General mechanical ventilation can be expected to effectively remove

and prevent buildup of any dust generated from handling this

product in a closed environment

#### **Personal Protection:**

Eyes: Wear safety glasses with side shields. Wear additional eye protection such as chemical goggles or face shield if splashing or spraying hazard exists. Have an eye wash station

available.

*Body:* To prevent skin contact use coveralls, apron, boots, or lab coat.

*Hands:* Avoid skin contact by using chemically resistant gloves.

Respiratory: NIOSH APPROVED DUST RESPIRATOR IF OVEREXPOSURE POTENTIAL EXISTS.

EYE PROTECTION: SAFETY GLASSES, GOGGLES, OR FACE SHIELD RECOMMENDED.

Other: Open wounds or skin surface disruptions should be covered with a chemical resistant patch to minimize absorption risks. Clean clothing should be worn daily to avoid possible

long-term buildup of the product leading to chronic overexposure.

Section 9. Physical and Chemical Properties

APPEARANCE: RED POWDER BOILING POINT: NOT APPLICABLE VAPOR PRESSURE: NOT APPLICABLE VAPOR DENSITY: NOT APPLICABLE SOLUBILITY IN WATER: INSOLUBLE

**SPECIFIC GRAVITY:** 5.0 **pH:** NOT DETERMINED

**ODOR:** NONE

**ODOR THRESHOLD: NOT APPLICABLE** 

## Section 10. Stability and Reactivity

**CONDITIONS TO AVOID: NONE** 

INCOMPATIBILITY: IRON OXIDES ARE NOT COMPATIBLE WITH HYDRAZINE, CALCIUM

HYPOCHLORITE, PERFORMIC ACID, AND BROMINE PENTAFLUORIDE.

**HAZARDOUS DECOMPOSITION PRODUCTS: NONE** 

**HAZARDOUS POLYMERIZATION: NONE** 

Section 11. Toxicological Information

THERE ARE NO KNOWN DANGEROUS ACUTE OR CHRONIC EFFECTS ASSOCIATED WITH THE USE OF THIS MATERIAL. THE ACUTE ORAL TOXICITY LD $_{50}$  ORAL (RAT) FOR Fe $_{2}$ O $_{3}$  IS GREATER THAN 10 g/kg (RAT). THIS PRODUCT IS NOT CONSIDERED TO BE A KNOWN OR SUSPECTED CARCINOGEN BY NTP, IARC, OR OSHA.

Section 12. Ecological Information

NO HARMFUL EFFECTS KNOWN OTHER THAN THOSE ASSOCIATED WITH SUSPENDED INERT SOLIDS IN WATER.

Section 13. Disposal Considerations

COLLECT IN CONTAINERS, BAGS, OR COVERED DUMPSTER BOXES. IF REUSE OR RECYCLING IS NOT POSSIBLE, MATERIAL MAY BE DISPOSED OF AT A CHEMICALLY SECURE LANDFILL. RCRA HAZARDOUS WASTE NUMBER: NOT FEDERALLY REGULATED.

Section 14. Transport Information

**U.S. DOT:** NOT REGULATED - ENTER THE PROPER FREIGHT CLASSIFICATION ON THE SHIPPING PAPERWORK,

"MSDS NUMBER", AND "PRODUCT NAME" FOR SHIPPING PURPOSES.

CANADIAN TDG HAZARD CLASS & PIN: NOT REGULATED.

Section 15. Regulatory Information

Hazardous Material Information System:

Health	0
Fire Hazard	0
Physical Hazard	0
Personal Protection	X

TSCA STATUS: COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

**CERCLA REPORTABLE QUANTITY: NONE** 

SARA TITLE III

**SECTION 311/312 HAZARDOUS CATAGORIES: NONE** 

**SECTION 313 TOXIC CHEMICALS: NONE** 

INTERNATIONAL REGULATIONS:

**CANADIAN DSL - COMPONENTS ARE LISTED.** 

CANADIAN WHMIS - THIS MATERIAL IS NOT A CONTROLLED SUBSTANCE UNDER WHMIS.

EUROPEAN COMMUNITY - LISTED ON ECOIN, THE EUROPEAN CORE INVENTORY.

**CALIFORNIA PROPOSITION 65:** THERE ARE EXTREMELY SMALL, BUT DETECTABLE AMOUNTS OF SUBSTANCES REGULATED UNDER CALIFORNIA'S SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT.

ARSENIC: LESS THAN 2 ppm BERYLLIUM: LESS THAN 2 ppm CADMIUM: LESS THAN 2 ppm

CHROMIUM (VI): LESS THAN 0.1 ppm

LEAD: LESS THAN 10 ppm

THESE LEVELS ARE "TYPICAL" QUANTITIES AND MAY CHANGE SLIGHTLY WITH DIFFERENT LOTS. THE TERM "LESS THAN" INDICATES THAT THE SUBSTANCE WAS DETECTED, BUT THE AMOUNT WAS LESS THAN THE QUANTIFIABLE LIMIT.

Section 16. Other Information

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