

**Material Safety Data Sheet (MSDS)**

**OCHRE LIMONITE - Red**

**01-Product and Manufacturer Identification**

**Product name:** RED OCHRE LIMONITE

**Manufacturer:** Óxido de Ferro Rio Acima Ltda

**Address:** Fazenda do Viana –Bairro Morgan-Rio Acima-MG

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**02- Material composition and ingredient information**

**Substance**

**OCHRE LIMONITE**

**Common or generic chemical name**

Iron Hydroxide

**03-Hazard Identification**

**Product effects**

Routes of Exposure: Eye contact, skin contact, inhalation

Acute exposure effects: according to toxicological information available, this product can be considered a non-irritating product. In concentrations above occupational exposure limits, it can cause mechanical irritation to the eyes and temporary discomfort to the respiratory tract. Skin or mucous membrane may be damaged by direct mechanical action or when skin is vigorously cleaned for dust removal.

Chronic exposure effects: No chronic health effects are known from repeated exposure to ochre limonite.

## **04-First Aid Measures**

### **Inhalation**

Remove victim to fresh air, keep them warm and at rest. If victim has difficulty breathing or stops breathing, apply artificial respiration. Unconscious victims should be given nothing to eat or drink. Restore consciousness. Seek medical attention.

### **Skin contact**

Wash with soap and water.

### **Eye contact**

If victim is wearing contact lenses, have them removed. Flush with plenty of water. If prolonged eye irritation occurs, consult an ophthalmologist.

### **Ingestion**

Do not induce vomiting. Keep person at rest. Seek medical attention.

## **05-Fire Fighting Measures**

### **Appropriate extinguishing agents**

Non-combustible material.

### **Special methods**

Red pigments are not flammable, and therefore pose no fire hazards. Packing materials (paper bags, plastic films) are combustible. Fire involving packing material should be extinguished using water.

## **06- Steps to be taken in case of Material Spill or Leak**

### **Personal safety precautions**

#### **Dust control**

Remove the product with a vacuum cleaner or a shovel. Avoid generating too much dust. If too much dust is generated when removing the product, wear a respirator mask ( dust mask).

### **Prevention of inhalation exposure and contact with skin, mucous membrane and eyes**

Avoid inhalation. Avoid product contact with skin, mucous membrane and eyes. Wear personal protection equipment as recommended.

## **Environmental precautions**

Take precautions to prevent the product from coming into contact with or being disposed onto the ground and into rivers and lakes. Iron oxide is a potentially non-polluting inorganic pigment.

## **Clean-up method**

## **Disposal**

Product should be disposed of as required under local regulations.

## **07-Handling and Storage**

### **Handling**

#### **Technical measures**

Product should be handled as specified in the applicable safety standards. Wear personal protective equipment as recommended.

No special measures are required.

### **Precautions and instructions for safe handling**

Wear PPE

Avoid contact with skin, mucous membrane and eyes. Handle product in a well-ventilated place. Do not reuse product packing materials. Do not eat or drink while handling the product.

### **Storage**

#### **Appropriate technical measures**

Store product in dry, well-ventilated areas, away from food products. Keep packages closed at all times.

#### **Storage conditions**

##### **Appropriate conditions**

Store product in a dry, cool, covered area (at ambient temperature).

##### **Conditions to avoid**

Wet, uncovered places

##### **Recommended conditions**

Use paper bags and polypropylene woven Big Bags.

## **08-Exposure control and personal protection**

### **Appropriate technical measures**

Store the product in dry, cool areas, far from food products. Keep packages closed at all times.

### **Storage conditions**

#### **Appropriate conditions**

Dry, cool, covered areas (at ambient temperature).

#### **Conditions to avoid**

Wet, uncovered places

### **Recommended conditions**

Paper bags and polypropylene woven Big Bags.

### **Occupational exposure limits**

Brazilian legislation: Not specified in NR 15, Attachment 11.

### **Appropriate personal protective equipment**

#### **Respiratory protection**

Wear dust mask.

#### **Hand protection**

It is recommended that rubber, fabric or latex gloves be worn to reduce skin contact, where appropriate to ensure safe working conditions.

#### **Eye protection**

Safety glasses.

#### **Body skin protection**

It is recommended that rubber, fabric or latex gloves be worn to reduce skin contact, where appropriate to ensure safe working conditions.

#### **Special safety precautions**

An eyewash station should be available.

### **Hygiene measures**

Keep your workplace clean. Do not eat, drink or store food in your workplace. Wash hands with water and soap after work.

## **09-Physical-Chemical Properties**

### **Physical state**

Dust

### **Form**

Solid

### **Color**

Red

### **Odor**

Odorless

### **Ph**

3,6– 6,5 in aqueous suspension (5g / 50 ml water)

### **Solubility**

Not soluble in water

## **10-Stability**

The product is stable.

## **11-Toxicological information**

### **Local effects**

According to current knowledge, red pigments are physiologically innocuous, but can cause, when they are in contact with the eyes and under extreme conditions, a brief, slight irritation of mucous membranes due to mechanical action (action of dust).

## **12 – Ecological information**

The product is virtually inert, and no adverse effects on the environment are known.

## **13 – Handling and Disposal Considerations**

Whenever the product cannot be collected for subsequent reuse, it should be disposed of at a site approved under local, state or national regulations. It is usually disposed onto the ground in municipal landfills, and no specific waste disposal requirements have been set by pollution control regulatory agencies.

#### **14 – Transport Information**

This product is not subject to any domestic or international transport classification, whichever the means of transport intended to be used, and is not classified as a hazardous product by the United Nations as far as transport considerations are concerned.

#### **15- Regulations**

Iron oxide is considered to be a non-hazardous product, according to the criteria set forth in the 29 CFR 1910.1200

#### **16 – Additional Information**

All information contained in this MSDS reflects the most common concepts relating to this product, based on extensive research into existing literature conducted before it was drawn up, and on information acquired over time by Óxido de Ferro Rio Acima Ltda from manufacturing and marketing this product. Finally, this MSDS has been reviewed with reference to the publication “Guide Occupational Exposure Values – ACGIH 2007”