

TAMAX-SDS-05 — Safety Data Sheet for Iron Oxide Red Pigment

TAMAX VENTURES LTD. — SAFETY DATA SHEET (SDS)

- **Document ID:** TMX-SDS-05
- **Chemical Name:** Synthetic Iron Oxide — $\alpha\text{-Fe}_2\text{O}_3$
- **Trade Name / Product:** Iron Oxide Red S130 Pigment
- **Company:** Tamax Ventures Ltd. (Kansarawdo Mampong Road, Yankey Junction, Takoradi, Ghana)
- **Emergency Contact (Ghana):** 191 (National Fire/Ambulance services) or +233-31-2092199

SECTION 1: Chemical Product & Company Identification

- **Synonyms:** Red Iron Oxide, Ferric Oxide, Pigment Red 101.
- **Chemical Formula:** Fe_2O_3
- **CAS Number:** 1309-37-1
- **Primary Uses:** Coloring agent for concrete, paving blocks, plasters, putties, coatings, and paints.

SECTION 2: Composition / Information on Ingredients

- **Major Ingredient:** Iron Oxide (Fe_2O_3) $\geq 95.0\%$.
- **Trace Constituents:** Minor impurities native to synthetic production (water-soluble salts $\leq 1.0\%$).

SECTION 3: Hazards Identification

[!NOTE] NON-HAZARDOUS STATUS

- This product is **not classified as hazardous** under standard international or regional regulations.
- It is considered a nuisance dust. Excessive inhalation of any dust can cause mechanical irritation of the respiratory tract.

SECTION 4: First Aid Measures

Eye Exposure

- **Action:** Flush eyes with plenty of water for several minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Inhalation

- **Action:** Move the affected person to fresh air. If discomfort persists, seek medical advice.

Skin Contact

- **Action:** Wash the affected area with mild soap and water.

Ingestion

- **Action:** Rinse mouth. Drink water. Do not induce vomiting unless directed by medical personnel. Consult a physician if large quantities are ingested.

SECTION 5: Fire-Fighting Measures

- **Flammability:** The substance is **non-flammable** and non-combustible.
- **Extinguishing Media:** Use extinguishing media appropriate for the surrounding fire.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Wear standard dust protection (mask and safety glasses) to prevent inhalation and eye contact.
- **Environmental Precautions:** Avoid significant discharge into drains or watercourses.
- **Spill Cleanup:** Collect spilled material mechanically (vacuum or sweep). Avoid generating excessive airborne dust. Place in suitable containers for disposal.

SECTION 7: Handling & Storage

Handling

- Handle in accordance with good industrial hygiene and safety practices. Avoid generating and inhaling dust. Ensure adequate ventilation.

Storage

- Store in dry, secure facilities away from direct exposure to rainwater. Ensure bags are tightly sealed to prevent moisture absorption and contamination.

SECTION 8: Exposure Controls & Personal Protection

- **Occupational Exposure Standard (OES):** Iron oxide fume/dust generally regulated at **5 mg/m³** (8-hour TWA) depending on local guidelines.

Personal Protective Equipment (PPE)

RECOMMENDED PPE	
	Mask: Dust Mask
	Eyes: Safety Glasses
	Hands: Work Gloves

- **Skin Protection:** Standard work clothing is sufficient.

SECTION 9: Physical & Chemical Properties

- **Appearance:** Dry, loose, spherical red powder.
- **Odor:** Odorless.
- **pH value:** 5.0 – 8.0 (in aqueous suspension).
- **Specific Gravity:** ~ 5.0 g/ml.
- **Solubility:** Insoluble in water and organic solvents. Soluble in concentrated acids.

SECTION 10: Toxicological & Ecological Information

- **Toxicological Profile:** Acute toxicity is very low. Not a skin or eye irritant under normal conditions (mechanical irritation possible). Not known to be carcinogenic or mutagenic.
- **Ecotoxicity:** Environmentally inert. Insoluble nature means it poses minimal risk to aquatic environments.