

SECTION I: PRODUCT INFORMATION

Product Name: Burnt Sienna
 Chemical Family: Inorganic pigment
 Product Uses: Pigment
 Revision Date: February 1, 2013

SECTION II: COMPOSITION

Component	CAS #	%	LD ₅₀ (gm/kg) Oral	LD ₅₀ (gm/kg) Skin	LC ₅₀ ppm Inhalation
Iron Oxide (Fe ₂ O ₃)	1309-37-1	85 – 85	>10,000	not known	not known
Crystalline Silica (SiO ₂)	14808-60-7	3 – 4	not known	not known	not known
Magnesium silicate (Talc)	14807-96-6	4 – 5	not known	not known	not known
Magnesite (MgCO ₃)	546-93-0	3 – 4	not known	not known	not known

SECTION III: PHYSICAL DATA

Odour & Appearance: Odourless reddish - brown powder
 Odour Threshold: Not known
 Vapour Pressure: None – will not vaporize
 Evaporation Rate (Butyl Acetate=1) : None – not volatile
 Vapour Density (air = 1) : 5.5
 Boiling Range: Not applicable
 Melting Point: 1565°C / 2849°F – *Fe₂O₃ only*
 Density: 2.9
 Water Solubility: 2% – (*MgO*) & (*CaO*) are water soluble
 Acid Solubility: Yes
 Viscosity: Not applicable – solid substance
 pH: 5.5
 Molecular Weight: Not available

SECTION IV: FIRE AND EXPLOSION

Flash Point: Cannot burn
 Auto ignition Temperature: Cannot burn
 Flammable Limits: Cannot burn
 Combustion Products: None
 Firefighting Precautions: As for materials sustaining fire; firefighters

Static Charge Accumulation: must wear SCBA
Cannot burn, not applicable

SECTION V: REACTIVITY DATA

Dangerously Reactive With: Not known
Also Reactive With: CaO & MgO react with water & with acids, but only 2% of product
Stability: Stable; will not polymerize
Decomposes in Presence of: Red hot carbon (Fe₂O₃)
Decomposition Products: Iron and carbon monoxide/carbon dioxide
Sensitive to Mechanical Impact: No

SECTION VI: HEALTH & ENVIRONMENTAL INFORMATION DATA

Summary: inhalation of product dust may damage lung, possible carcinogen
Canada – WHMIS: D2A
U.S.A. – HMIS: Health – 1, Fire – 0, Reactivity – 0

Effects, Acute Exposure

Skin Contact: No effect
Skin Absorption: Nil
Eye Contact : Dust may be a mechanical irritant
Inhalation: Dust may be a mechanical irritant, causing coughing and/or sneezing
Ingestion: Not known; probably no effect – not a route of industrial exposure

Effects, Chronic Exposure

General: Prolonged exposure to dust in iron ore miners has resulted in iron oxide accumulation in lungs; a form of benign pneumoconiosis has been associated with high levels of exposure to iron oxide dust. Prolonged exposure to magnesium silicate by inhalation may cause talc pneumoconiosis (talcosis), which affects the lungs.
Sensitizing: Not a sensitizer in humans or animals
Carcinogen/Tumorigen: Iron oxide is not considered a tumorigen or a carcinogen in humans or animals. Crystalline silica is considered to be a human carcinogen. Remaining components are neither tumorigens nor carcinogens in humans or animals.

Reproductive Effect: No known effect in humans or animals
 Mutagen: No known effect on humans or animals
 Synergistic With: Not known
 LD₅₀ (oral): Above 10,000
 LD₅₀ (skin): Not known
 LC₅₀ (inhalation): Not known

Environmental Information

Bioaccumulation: This product cannot bioaccumulate
 Biodegradation: This product is relatively inert and will not biodegrade
 Abiotic Degradation: This product is relatively inert and will not undergo abiotic degradation
 Mobility in soil & water: This product is water insoluble and will not move in soil and water
 Marine Toxicity: No data

SECTION VII: SPILLS, LEAKS, & DISPOSAL PROCEDURES

Leak Precaution: Not required – solid material
 Handling Spill: Shovel carefully (do not create dust) or vacuum spilled material; sprinkle residue with dust-suppressing sweeping compound, sweep, shovel and store in closed containers for disposal
 Waste Disposal: Do not flush to sewer, this product is not a hazardous waste; may be dumped in sanitary landfill unless local regulations forbid this

SECTION VIII: PROTECTION EQUIPMENT

Exposure Values:	Component	ACGIH TLV	OSHA PEL	NIOSH
	Iron Oxide	5mg/m ³ (fumes)	10 mg/m ³ (fumes)	5 mg/m ³ (fumes)
	Magnesium silicate (Talc)	2mg/m ³ (respirable)	20 mppcf < 1% quartz	2 mg/m ³ (respirable)
	Magnesite	10mg/m ³ (total)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (total) 5 mg/m ³ (respirable)
	Crystalline Silica	0.05mg/m ³ (respirable)	not known	0.05 mg/m ³ (respirable)

		0.025 mg/m ³ (SiO)		
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Ventilation:	Mechanical ventilation may be required to maintain airborne dust below TWAEV; depending on handling procedures
Hands:	No special protective gloves required
Eyes:	Safety glasses with side shields – <i>always protect the eyes</i>
Clothing:	No special protective clothing required
Respirator:	NIOSH approved dust mask

SECTION IX: FIRST AID

SKIN:	Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES:	Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.
INHALATION:	Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION:	Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity substance. The stomach should only be emptied under medical supervision, and after the installation of an airway to protect the lungs.

SECTION X: HANDLING & STORAGE REQUIREMENTS

- Avoid breathing product dust.
- Ventilation should be installed to clear any dust formed at source.
- Avoid unnecessary contact with skin and wash work clothes frequently.
- An eye bath should be available near the workplace.
- Avoid moisture.
- No other special storage requirements.

SECTION XI: SHIPPING INFORMATION

Canada TDG:

PIN UN-not regulated for transport

U.S.A. 49 CFR:

PIN UN- not regulated for transport

Marine Pollutant:

Not a marine pollutant

SECTION XII: OTHER

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that its activities comply with all federal, provincial or local regulations. It is the buyer's/user's responsibility to determine the safety, toxicity, and suitability for their own use of the product described herein. Conditions of use are beyond Colors of Nature's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.