

**MATERIAL SAFETY DATA SHEET****824-1006 CHROMA-CHEM® LIGHT RED OXIDE**

Material no.		Version	1.29 / US
Specification	139923	Revision date	10/13/2010
Order Number		Print Date	05/22/2012
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**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : 824-1006 CHROMA-CHEM® LIGHT RED OXIDE  
Use of the Substance / : Non-aqueous colorant  
Preparation  
Company : Chromaflo Technologies Corporation  
2600 Michigan Avenue  
Ashtabula, OH 44005-0816  
USA

Telephone : 973-929-8000

Telefax : 973-929-8040

**US: CHEMTREC EMERGENCY NUMBER** : 800-424-9300

**CANADA: CANUTEC EMERGENCY NUMBER** : 613-996-6666

Product Regulatory Services : 973-929-8060

**2. HAZARDS IDENTIFICATION****\*\*\* EMERGENCY OVERVIEW \*\*\***

*Form-paste    Color-red    Odor-Petroleum distillate odor.*

May cause eye, skin and respiratory tract irritation.  
Combustible liquid and vapor.

**POTENTIAL HEALTH EFFECTS****Eye contact**

According to test results on similar colorant base mixtures, this product is classified as a moderate eye irritant. May cause tearing, reddening and/or swelling.

**Skin Contact**

Moderate irritant according to test results on similar base mixtures.  
Prolonged or repeated contact may result in defatting and drying of the skin causing skin irritation and dermatitis (rash).

**Inhalation**

Possibly irritating.  
Excessive inhalation of solvent vapors may cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and even death.

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**Ingestion**

May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

**Chronic Health Hazard**

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

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. Amorphous silica may cause respiratory irritation but does not cause silicosis based on animal testing by NIOSH.

Inhalation of high dust levels of barium sulfate may cause baritosis, an irritation of the lung tissue which is not incapacitating and usually is reversible.

Because this product is a free-flowing liquid or paste, dust inhalation is not an expected route of exposure.

Male rats and mice exposed to methyl ethyl ketoxime (MEKO) throughout their lifetimes developed liver cancer. Since many commonly used chemicals cause liver cancer in rats and mice, additional testing on MEKO is planned or underway to determine any relevance to humans. Until additional data is developed, exposure levels should be maintained as low as achievable.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Information on ingredients / Hazardous components**

Iron Oxide				
CAS-No.	1309-37-1	Percent (Wt./ Wt.)		30 - 60 %
Stoddard solvent; Low boiling point naphtha - unspecified				
CAS-No.	8052-41-3	Percent (Wt./ Wt.)		10 - 30 %
Amorphous silica				
CAS-No.	7631-86-9	Percent (Wt./ Wt.)		1 - 5 %
Barium sulfate				
CAS-No.	7727-43-7	Percent (Wt./ Wt.)		1 - 5 %
Distillates (petroleum), hydrotreated light; Kerosine - unspecified				
CAS-No.	64742-47-8	Percent (Wt./ Wt.)		1 - 5 %

**Other information**

This material is classified as hazardous under OSHA regulations.

**4. FIRST AID MEASURES****Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

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**Skin contact**

Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If symptoms develop or persist, obtain medical attention. Wash clothing before reuse.

**Eye contact**

In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

**Ingestion**

If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Aspiration of material into the lungs may cause chemical pneumonitis (damage to lungs) which may be fatal.

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**5. FIRE-FIGHTING MEASURES**

Flash point 38.33 °C , 101 °F  
Method: Pensky-Martens C.C.

OSHA Flammability Classification Combustible Liquid

**Suitable extinguishing media**

Use water spray or fog, foam, dry chemical or CO2.

**Specific hazards during fire fighting**

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

**Further information**

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

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**6. ACCIDENTAL RELEASE MEASURES****Additional advice**

Absorb spill with inert material, then place in a chemical waste container. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Remove sources of ignition and ventilate area. Use a respirator and other protective equipment as outlined in Section 8. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

**7. HANDLING AND STORAGE****Handling****Safe handling advice**

Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

**Storage****Requirements for storage areas and containers**

Keep in a dry, cool place.

Keep container closed when not in use.

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Component occupational exposure guidelines****• Stoddard solvent; Low boiling point naphtha - unspecified**

CAS-No. 8052-41-3

Control parameters 100 ppm

500 ppm

2900 mg/m<sup>3</sup>

100 ppm

525 mg/m<sup>3</sup>

Time Weighted Average (TWA):(ACGIH)

PEL:(OSHA Z1)

Time Weighted Average (TWA)

Permissible Exposure Limit (PEL):(US CA OEL)

**• Amorphous silica**

CAS-No. 7631-86-9

20millions of particles  
per cubic foot of air

0.8 mg/m<sup>3</sup>

The exposure limit is calculated from the equation, 80/(%SiO<sub>2</sub>), using a value of 100% SiO<sub>2</sub>. Lower values of % SiO<sub>2</sub> will give higher exposure limits.

Time Weighted Average (TWA):(Z3)

Time Weighted Average (TWA):(Z3)

**• Barium sulfate**

CAS-No. 7727-43-7

10 mg/m<sup>3</sup>

Time Weighted Average (TWA):(ACGIH)

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5 mg/m3  
Respirable fraction. PEL:(OSHA Z1)

15 mg/m3  
Total dust. PEL:(OSHA Z1)

0.5 mg/m3 as Ba  
Time Weighted Average (TWA)  
Permissible Exposure Limit (PEL):(US CA OEL)

**• Iron Oxide**

CAS-No. 1309-37-1  
10 mg/m3  
Fume. PEL:(OSHA Z1)

5 mg/m3  
Time Weighted Average (TWA)  
Permissible Exposure Limit (PEL):(US CA OEL)

Fume.

5 mg/m3  
Respirable fraction. Time Weighted Average (TWA):(ACGIH)

**Engineering measures**

Use explosion-proof ventilation equipment.

**Personal protective equipment****Respiratory protection**

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**Hand protection**

Use impermeable gloves.

**Eye protection**

Chemical resistant goggles must be worn.

**Skin and body protection**

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form	paste
Color	red
Odor	Petroleum distillate odor.

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**Safety data**

Boiling point/range	> 149 °C
Flash point	38.33 °C Method: Pensky-Martens C.C.
Relative density	1.9
Solubility/qualitative	Solubility in water: Slight.
Viscosity, dynamic	95 - 115 KU (25 °C)
Solvents and Volatiles Data	
	% VOC (gm/l) 274
Evaporation rate	Slower than butyl acetate

**10. STABILITY AND REACTIVITY**

Conditions to avoid	Avoid high temperatures and sources of ignition.
Materials to avoid	oxidizing substances  Ethylene oxide and guanidinium perchlorate (incompatible with iron oxide.)

**11. TOXICOLOGICAL INFORMATION**

Component Acute oral toxicity	Iron Oxide 1309-37-1 LD50 Rat: > 5000 mg/kg  Stoddard solvent; Low boiling point naphtha - unspecified 8052-41-3 LD50 Rat: > 5000 mg/kg  Amorphous silica 7631-86-9 LD50 Rat: > 31600 mg/kg  Distillates (petroleum), hydrotreated light; Kerosine - unspecified 64742-47-8 LD50 Rat: > 15000 mg/kg
Component Acute inhalation toxicity	Stoddard solvent; Low boiling point naphtha - unspecified 8052-41-3 LC50 Rat: > 5500 mg/m3 / 4 h  Distillates (petroleum), hydrotreated light; Kerosine - unspecified 64742-47-8 LC50 Rat: > 14100 mg/m3 / 4 h

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Component Acute dermal toxicity	Stoddard solvent; Low boiling point naphtha - unspecified 8052-41-3 LD50 Rabbit: > 3000 mg/kg  Amorphous silica 7631-86-9 LD50 Rabbit: > 2000 mg/kg  Distillates (petroleum), hydrotreated light; Kerosine - unspecified 64742-47-8 LD50 Rabbit: > 2000 mg/kg
Component Repeated dose toxicity	Amorphous silica 7631-86-9 Long term or repeated exposure to amorphous silica has caused lung effects in animals.
Component General Toxicity Information	Barium sulfate 7727-43-7 Inhalation of high dust levels of barium sulfate may cause baritosis, an irritation of the lung tissue which is not incapacitating and usually is reversible.

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**12. ECOLOGICAL INFORMATION**

General Ecological Information No ecotoxicological studies are available.

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**13. DISPOSAL CONSIDERATIONS****WASTE DISPOSAL**

Advice on disposal Waste must be disposed of in accordance with federal, state, provincial and local regulations. CONTAINER DISPOSAL: Empty containers by removing the top and inverting to allow all free-flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash. Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with mineral spirits until the containers are considered generally product free.

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**14. TRANSPORT INFORMATION**

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**Sea transport IMDG-Code**

Class	3
UN-No	1263
Packaging group	III
EmS	F-E, S-E

Proper technical name (Proper shipping name)  
PAINT RELATED MATERIAL

**Air transport ICAO-TI/IATA-DGR**

Class	3
UN-No	1263
Packaging group	III

Proper technical name (Proper shipping name)  
Paint related material

**Loading instructions/Remarks**

IATA_C	ERG-Code 3L
IATA_P	ERG-Code 3L
CFR_INWTR	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.
CFR_RAIL	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.
CFR_ROAD	In the U.S. this material may be classified as combustible liquid. Combustible liquids are not regulated in packages 450 liters or less. This applies for shipments by road and rail only.

**15. REGULATORY INFORMATION****Information on ingredients / Non-hazardous components**

This product contains the following non-hazardous components

NJTSR No.56705700001-5032P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	1 - 5 %
NJTSR No.56705700001-5069P			
CAS-No.	Trade Secret	Percent (Wt./ Wt.)	10 - 30 %

**US Federal Regulations****OSHA**

If listed below, chemical specific standards apply to the product or components:

- None listed

**Clean Air Act Section (112)**

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

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**CERCLA Reportable Quantities**

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

**SARA Title III Section 311/312 Hazard Categories**

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

**SARA Title III Section 313 Reportable Substances**

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

**Toxic Substances Control Act (TSCA)**

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

**State Regulations****California Proposition 65**

A warning under the California Drinking Water Act is required only if listed below:

- None listed

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**International Chemical Inventory Status**

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact the Product Regulatory Services Department.

• Europe (EINECS/ELINCS)	Listed/registered
• USA (TSCA)	Listed/registered
• Canada (DSL)	Listed/registered
• Australia (AICS)	Listed/registered
• Japan (MITI)	Not listed/Not registered
• Korea (TCCL)	Listed/registered
• Philippines (PICCS)	Listed/registered
• China	Listed/registered
• New Zealand	Not listed/Not registered

**16. OTHER INFORMATION****HMIS Ratings**

Health :	2*
Flammability :	2
Physical Hazard :	0

**Further information**

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.