

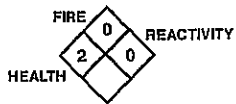


MATERIAL SAFETY DATA SHEET and WARRANTY

A104-5G14

Date: July 14, 2005

Section I Identification



HEALTH	[2]
FLAMMABILITY	[0]
REACTIVITY	[0]
PROTECTION	[E]

Product Name:	LITHOCHROME® Color Hardener
Chemical Name:	Mixture
Chemical Family:	Mixture
Chemical Formula:	Mixture
Emergency Telephone Number:	CHEMTREC (800) 424-9300
Telephone Number for Information:	SCOFIELD (770) 920-6000 (323) 720-3000

Section II Composition/ Information on Ingredients

Composition	Weight	OSHA TWA	ACGIH TLV	CAS Number
Silica, Crystalline Quartz	40-70%	0.1 mg/m ³	0.1 mg/m ³	14808-60-7
Cement	30-60%	10 mg/m ³ (Total) 5 mg/m ³ (Respirable)	10 mg/m ³	65997-15-1

Section III Hazards Identification

Emergency Overview:

Warning! Harmful if inhaled. Irritating to eyes and skin. May cause delayed lung injury (silicosis). Cancer hazard. Risk of cancer depends on duration and level of exposure.

Acute Exposure:

Airborne particles will irritate the eyes and may cause temporary but reversible respiration difficulties. Cement is a severe eye irritant. In combination with water, it may cause alkali burns.

Chronic Exposure:

Repeated inhalation of respirable silica in excess of the TWA over extended periods of time may result in irreversible fibrosis of the lungs (silicosis).

Signs and Symptoms of Exposure:

Inhalation — **Undue coughing, wheezing, and breathlessness.**
 Eyes — **Irritation, inflammation or abrasion of the eye.**
 Skin — **Dryness, itching, rashes and burns may develop following contact with the skin. Dermatitis or skin sensitization may develop after repeated or prolonged skin contact.**
 Ingestion — **May cause discomfort if swallowed.**

Medical Conditions Generally Aggravated by Exposure: **Dermatitis, pulmonary conditions and diseases.**

Section IV First Aid Measures

Emergency and First Aid Procedures:

Inhalation — **If inhaled, or if difficulty in breathing is experienced, move to fresh air. If coughing, irritation, difficulty in breathing, or other respiratory symptoms persist or develop, get medical attention.**
 Skin — **Wash thoroughly with soap and water. Remove soiled clothing and wash before reuse. If symptoms develop, get medical attention.**
 Ingestion — **Get medical attention.**

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Section IV First Aid Measures (continued)

Emergency and First Aid Procedures (continued):

Eyes — **DO NOT RUB EYES.** Immediately flush thoroughly with plenty of water and get medical attention.

Note to physician — Mucosal injury following ingestion of this material may contraindicate the induction of vomiting in the treatment of possible ingestion.

Section V Fire and Explosion Hazard Data

Flash Point (Method Used):

None

Flammable Limits:

Not applicable

Extinguishing Media:

Nonflammable/noncombustible. Use agents appropriate for surrounding fire.

Special Fire Fighting Procedures:

Not applicable

Unusual Fire and Explosion Hazards:

None known

Section VI Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Only qualified personnel who have read the product Tech-Data Bulletins and this MSDS should conduct these procedures. Persons not wearing protective equipment should be excluded from the area. Follow procedures in *Section VIII—Exposure Controls/Personal Protection*. Avoid generating dust during recovery or disposal. Collect in labeled waste container.

Section VII Precautions for Safe Handling and Use

Precautions to be Taken in Handling and Storing: Follow personal protection procedures (*Section VIII*) when handling the material. Store in a cool, dry, well-ventilated area, in unopened original packaging or in tightly closed labeled containers. Protect from physical damage. Avoid contact with acids and other oxidizers. Avoid moisture; moisture may result in product hydration.

Section VIII Exposure Controls/ Personal Protection

Ventilation/Engineering Controls: Adequate ventilation and sufficient local exhaust as needed to maintain exposure below TWA and TLV limits.

Respiratory Protection: Wear dust (particulate) respirator (NIOSH TC-84A approved). 3M Company's *Tech Line* (1-800-243-4630) may be helpful for respirator advice and availability. For respiratory protection guidelines refer to OSHA 29 CFR 1910.134.

Eye Protection: Wear safety goggles. Wearing of contact lenses when working with this product is not recommended.

Skin Protection: Wear impervious gloves.

Other Protective Clothing or Equipment: Wear suitable protective clothing to minimize skin contact.

Work/Hygienic Practices: Minimize exposure in accordance with good hygienic practice. Wash with soap and water immediately after handling.

Section IX Physical and Chemical Characteristics

Boiling Point:

Not applicable

Vapor Pressure (mm Hg.):

Not applicable

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Section IX Physical and Chemical Characteristics (continued)

Vapor Density (Air = 1):	Not applicable
Solubility in Water:	Slight
Specific Gravity (H ₂ O = 1):	Approximately 2.7–3.0
Melting Point:	Not applicable
Evaporation Rate (Butyl Acetate = 1):	Not applicable
Volatile Organic Compounds:	Nil
Appearance and Odor:	Gritty powder. Various colors. No odor.

Section X Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	Product reacts (hydrates) at a slow, controlled rate when mixed with water releasing minimal heat.
Incompatibility (Materials to Avoid):	Strong oxidizing agents such as strong organic and inorganic acids. Acids will react with cement.
Hazardous Decomposition or By-products:	No hazardous reaction under normal conditions.
Hazardous Polymerization:	Will not occur.

Section XI Toxicological Information

Health Hazards (Acute and Chronic):

Airborne particles will irritate the eyes and may cause temporary but reversible respiration difficulties. Cement, in combination with water, may cause alkali burns. Repeated inhalation of respirable silica in excess of the TWA over extended periods of time may result in irreversible fibrosis of the lungs (silicosis).

IARC—The International Agency for Research on Cancer evaluation was that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1).” The IARC evaluation noted that “carcinogenicity was not detected in all industrial circumstances studies.” For further information on the IARC evaluation, see IARC *Monographs on the Evaluation of Carcinogenic Risks to Humans*, Volume 68, “Silica, Some Silicates . . .” (1997).

NTP—The National Toxicology Program, in its *Ninth Annual Report on Carcinogens*, classified “silica, crystalline (respirable)” as a known human carcinogen.

OSHA—Crystalline silica (quartz) is not regulated by the U. S. Occupational Safety and Health Administration as a carcinogen.

Section XII Ecological Information

Aquatic Toxicity Rating:

LC₅₀ aquatic toxicity rating not determined. The addition of products containing cement to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances. Therefore, all possible efforts should be made to keep the product away from drains, surface and ground water, and soil.

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Section XIII Disposal Considerations

Waste Disposal Method:

Follow personal protection procedures (*Section VIII*) when disposing of material. Disposal of all residual or recovered product must be in accordance with all applicable federal, state, and local regulations.

Section XIV Transport Information

DOT Hazard Class:

Not regulated

Section XV Regulatory Information

U. S. Federal Regulations:

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training, and access to written records. It is your legal duty to make all information in this Material Safety Data Sheet available to your employees.

State Regulations:

State of California *Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*; WARNING: This product contains one or more chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

International Regulations:

Consult the regulations of the importing country.

Section XVI Other Information

Before using this product:

Completely read the Scofield Tech-Data Bulletin *A-104 LITHOCHROME Color Hardener* and the product label.

WARRANTY

Since no control is exercised over product use, L. M. Scofield Company (Scofield) represents and warrants only that its products are of consistent quality within manufacturing tolerances. NO OTHER ORAL OR WRITTEN REPRESENTATION OR STATEMENT OF ANY KIND, EXPRESS OR IMPLIED, NOW OR HEREAFTER MADE IS AUTHORIZED OR WARRANTED BY SCOFIELD, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Liability for breach of contract, negligence, or on any other legal basis is limited to the lesser of refund or replacement of defective materials. SCOFIELD WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING FOR DELAYS OR LOST PROFITS. Communication of this warranty and its limitations to end users is not the responsibility of Scofield, but should be communicated by those in direct contract with the end user. Any claim regarding product defect must be received in writing within one year from the date of manufacture. No claim will be considered without such written notice or after the specified time interval. The end user shall determine the suitability of the products for the intended use and assumes all risks and liability in connection therewith.
