



Safety Data Sheet and Warranty

LITHOCHROME® Color Hardener - 1110

July 14, 2015 According to GHS OSHA 29 CFR 1910.1200 and 1272/2008/EC (CLP) amending 1907/2006/EC (REACH)

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1 GHS Product Identifier

Commercial Product Name: LITHOCHROME® Color Hardener

Chemical Name: Mixture of silica sand, portland cement, pigments and additives (or admixtures)

1.2 Relevant identified uses of product:

Product is a dry-shake color hardener for application on freshly-placed concrete to color and harden the concrete surface. This product is intended for use only by professionals.

1.3 Details of the supplier of the safety data sheet:

L. M. SCOFIELD Company	Scofield Phone No. (800) 800-9900	www.scofield.com
6533 Bandini Blvd, Los Angeles, CA 90040	Information Phone Number (323) 720-3000	
4155 Scofield Road, Douglasville, GA 30134	Information Phone Number (770) 920-6000	

1.4 Transportation Emergency Telephone Number: CHEMTREC (800) 424-9300

2 HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture:

Human Health:

Product contains silica sand, a form of crystalline silica. Properly fitted dust-type respirators can control silica exposure.

Product contains portland cement which when wet can irritate the skin and seriously damage the eyes.

Product may contain titanium dioxide, which is considered to be a class 2B carcinogen by IARC.

Acute toxicity, eyes, SE, H318, category 1

Acute toxicity, dermal, SE, H315, category 2

Carcinogenicity, STOT, lungs, Inhalation, RE, H350, category 1B

GHS Category Key

1 = most hazardous

5 = least hazardous

Environment: Product is not dangerous to the environment, upon water addition it will set to a hard mass that is not biodegradable.

2.2 Label elements:

GHS Hazard (H) Statements:

Acute Toxicity

H315--Causes skin irritation

H318--Causes serious eye damage

Chronic Toxicity

H350--May cause cancer (silicosis) repeated exposure to respirable silica. IARC lists Titanium Dioxide as a 2B carcinogen.

GHS Precautionary (P) Statements:

Prevention Precautionary Statements

P102--Keep out of reach of children

P202--Do not handle until all safety precautions have been read and understood

P280--Wear protective gloves/eye protection/face protection

P284--In case of inadequate ventilation, wear respiratory protection

Response Precautionary Statements



GHS Signal Word: **WARNING**

P301+P330+P331--**IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.

P302+P352--**IF ON SKIN:** Wash with plenty of water

P304+P340--**IF INHALED:** Move person to fresh air and keep comfortable for breathing

P305+P351+P338--**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contacts and continue rinsing.

P337+P313--If eye irritation persists, get medical attention

Disposal

P501--Dispose of contents/container in accordance with applicable local/state/federal regulations

2.3 Other hazards:

No other hazards are known.

Refer to Section 16 for wording of terms

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Main Constituent: Crystalline Quartz Silica Sand

3.2 Mixture:

Components of Mixture	CAS #	EINECS #	Weight %
Silica Sand, Crystalline Quartz	14808-60-7	238-878-4	40 - 70%
Portland Cement	65997-15-1	266-043-4	30 - 60%
Flyash, Coal Combustion Residuals	68131-74-8	931-322-8	0 - 10%
Respirable Fraction of Silica Dust	14808-60-7	238-878-4	< 0.1%
Various pigments, mixed metal oxides	Mixtures	Mixtures	0 - 10%

The exact percentages and components in this composition have been withheld as trade secrets.

4 FIRST AID MEASURES

4.1 Description of first aid measures:

Eye Contact : Quickly flush with plenty of clean water for 15 minutes. Remove contact lenses if easy to do. Open eyelids widely during flushing. If irritation persists, continue flushing during transport to emergency room and bring these instructions for doctor. Provide easy access to eye wash station in work area.

Inhalation: Move person to fresh air, make comfortable for breathing. Get medical attention if condition worsens.

Skin Contact: May result in skin irritation. Remove contaminated clothing. Wash skin with soap and water.

Ingestion: If swallowed, do NOT induce vomiting. Call a POISON CENTER (800) 222-1222 or 911 for instructions on first aid treatment. Transport person to emergency room and bring these safety instructions (SDS).

4.2 Most important symptoms and effects both acute and delayed:

Eye contact with cement (wet or dry) can cause serious and potentially irreversible injuries to eyes. If irritation persists after rinsing eyes, take person to emergency room for treatment.

Repeated inhalation of respirable silica over long periods of time increases the risk of developing lung disease (silicosis).

Cement may have an irritating effect that is most severe when sweating. Prolonged skin contact with wet product may cause serious burns that develop without pain being felt.

4.3 Indication of any immediate medical attention and special treatment needed:

Primary routes of entry include: Inhalation (dust), Eye Contact, Skin Contact. Eye contact requires immediate first aid. Refer to SECTION 11 for more detailed information on health effects and symptoms.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media: Use fire extinguishing media appropriate for surrounding fire.

5.2 Special Hazards arising from the substance or mixture:

Fire Hazard: Not flammable

Explosion Hazard: No explosion hazard

Reactivity: Hazardous reactions will not occur.

5.3 Advice for fire-fighting:

Use normal fire fighting protective equipment.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions :

General measures: Use personal protective equipment. Provide adequate ventilation.
See section 8 for additional information.

Protective equipment: Wear suitable protective clothing with eye protection and gloves.

6.2 Environmental precautions:

Avoid discharge into waterways, sewers and soil. If spill enters water, contact local authorities.

6.3 Methods and material containment and cleaning up:

Method of cleaning up: Collect material in dry state if possible. Avoid generating dust. Recover product by vacuuming, shoveling or sweeping. Use a HEPA type filter on vacuum exhaust to prevent release of particulates into air.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling:

Do not breathe dust. Avoid creating or spreading dust. Handle in accordance with good industrial hygiene procedures. Always wash hands immediately after handling product. Do not eat or drink in area where product is being used. Repeated exposure to respirable silica over long time periods may cause cancer (silicosis).

7.2 Conditions for safe storage including any incompatibilities:

Store in a covered dry shaded area. Avoid all contact with water.


7.3 Specific end uses:

This product is intended for use only by professionals to color and harden freshly-placed (new) concrete surfaces.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control Parameters

NDA = No Data Available

Components of Mixture	ACGIH TLV	OSHA 8-hr TWA	NIOSH (TWA)	Personal Protective Equipment Symbols:
Portland Cement	1 mg/m ³	15 mg/m ³	10 mg/m ³	 Respirator Selection: Particulate filter, P100, N95
Silica Sand, Crystalline Quartz	0.025 mg/m ³	0.1 mg/m ³	0.05 mg/m ³	
Flyash, Coal Combustion Residuals	NDA	NDA	NDA	
Various Metal Oxide Pigments, nuisance dust	10 mg/m ³	NDA	NDA	
Total Silica Dust	NDA	(30 mg/m ³)/(SiO ₂ +2)	NDA	
Respirable Fraction of Silica Dust	0.025 mg/m ³	(10 mg/m ³)/(%SiO ₂ +2)	NDA	

8.2 Exposure controls:

Avoid breathing dust.

Corrosive: Do not get into eyes or on skin.

Engineering measures: Use only with adequate ventilation. Keep worker exposure of dust and airborne particulates below PEL & TLV limits in section 8.1

8.3 Individual protective measures:

Eye/face protection: Wear tight fitting goggles or safety glasses with side shields to protect eyes.

Skin protection: Wear protective clothing, rubber apron or coat and neoprene rubber gloves to protect skin.

Respiratory Protection: In case of inadequate ventilation, or where exposure levels are over limits in section 8.1, wear a proper NIOSH approved particulate-type respirator, such as N95 or P100 filters.

Hygiene measures: Wash hands after exposure, Remove contaminated clothing, shower and wash with plenty of soap and water. Wash contaminated clothing prior to reuse.

Environmental exposure controls: Have eye wash stations and emergency showers located near work area.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information of basic physical and chemical properties

Property-Test	Value/Result
a) pH	10-12 when wet, not applicable when dry
b) Color	various
c) Odor	not applicable
d) Freezing/Melting Point	not applicable
e) Boiling Range	not applicable
f) Flash Point	not applicable
g) Auto ignition Temperature	not applicable
h) Explosive Limits UEL	not applicable
i) Explosive Limits LEL	not applicable
j) Flammability (solid, gas)	not applicable
k) Vapor Pressure	not applicable
l) Vapor density vs air = 1.0	not applicable
m) Density	not applicable
n) Solubility in water	very low (only admixture portion is soluble)
o) KOW Partition Coefficient	not applicable
p) Evaporation Rate	not applicable
q) Viscosity	not applicable
r) VOC	0.0 g/mL (0.0 lb/gal)

9.2 Other information

Other data: Specific Gravity, water = 1.0 3.0 to 5.0

10 STABILITY AND REACTIVITY

10.1 Reactivity:	When water is added, hardening occurs to make a solid mass.
10.2 Chemical stability:	Product reacts rapidly with strong acids causing heat evolution
10.3 Possibility of hazardous reactions:	Hazardous reactions do not normally occur.
10.4 Conditions to avoid:	Avoid contact with strong acids and moisture.
10.5 Incompatible materials:	Water causes setting. Strong acids can react with product.
10.6 Hazardous decomposition products:	No hazardous decomposition products are known.

11 TOXICOLOGICAL INFORMATION

Components of Mixture	LD ₅₀ oral (rat)	LC ₅₀ Inhalation	LD ₅₀ skin (rabbit)
Portland Cement	2000 mg/kg	NDA	2,000 mg/kg limit test nonlethal
Silica Sand, Crystalline Quartz	>22,500 mg/kg	NDA	NDA
Flyash, Coal Combustion Residuals	>2,000 mg/kg	2.2 mg/L 1 hr	>2,000 mg/kg skin
Titanium Dioxide	5,000 mg/kg	>6.82 mg/L rat	no skin irritation
Misc. pigments, Metal Oxides, nuisance dust	NDA	NDA	NDA

Toxicity:	
a) acute toxicity,	Not classified as an acutely toxic material.
b) skin corrosion/irritation,	Wet cementitious products can cause serious skin irritation.
c) serious eye damage/irritation,	Wet cementitious products can cause serious eye damage.
d) respiratory or skin sensitization,	Repeated exposure to respirable silica can cause serious delayed lung injury. Portland cement can cause skin sensitization due to Chrome VI presence.

- e) germ cell mutagenicity Product does not cause germ cell mutagenicity.
- f) carcinogenicity by agency, Crystalline silica (respirable) in this product is identified by IARC, ACGIH and NTP as a potential carcinogen. The respirable silica in this product is identified by OSHA as a carcinogen or potential carcinogen.
- g) reproductive toxicity, Product does not cause or contribute to reproductive toxicity
- h) STOT-single exposure, Product can cause serious eye damage due to alkalinity. Single exposure is not expected to cause carcinogenicity due to respirable silica.
- i) STOT-repeated exposure, Repeated exposure to respirable silica can cause silicosis, a form of cancer.
Repeated exposure to respirable silica can contribute to COPD.
- No chronic effects have been observed when respirable silica is below limit levels.
- J) aspiration hazard, Product may contain titanium dioxide, which is considered to be a class 2B carcinogen by IARC.
Product is not an aspiration hazard.
- 11.1 Inhalation:** Product dust may irritate throat and respiratory system and cause coughing.
- 11.2 Skin contact:** Product dust has an irritating effect on moist skin. Repeated or prolonged contact with skin may cause allergic reactions in sensitive individuals.
- 11.3 Eye contact:** Dust from mixture can cause permanent eye damage. Immediate first aid is required, followed by emergency medical attention.
- 11.4 Ingestion:** Is not likely to occur because of composition. Ingestion may cause severe irritation of the mouth, esophagus and the gastrointestinal tract.
- 11.5 Specific effects:** Frequent inhalation over a long period of time increases the risk of developing lung disease.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic Toxicity Fish			Aquatic Toxicity Invertebrates		
	LC ₅₀	Species	Duration	EC ₅₀	Species	Duration
Components of Mixture	LC ₅₀	Species	Duration	EC ₅₀	Species	Duration
Portland Cement	NDA	NDA	NDA	350 mg/L est.	Daphnia magna	48 hr
Silica Sand, Crystalline Quartz	10,000 mg/L	Carp	72 hr	NDA	NDA	NDA
Flyash, Coal Combustion Residuals	NDA	NDA	NDA	NDA	NDA	NDA
Titanium Dioxide	>1,000 mg/L	Pimephales Prom.	96 hr	>1,000 mg/L	Daphnia magna	48 hr
Misc. pigments, Metal Oxides, nuisance dust	NDA	NDA	NDA	NDA	NDA	NDA

12.1 Toxicity:

NDA = No Data Available

Ecotoxicity: This product is not expected to be hazardous to the environment.

12.2 Persistence and degradability:

Degradability: This product reacts with water to form a solid mass that is not degradable.

12.3 Bioaccumulative Potential:

Bioaccumulative Potential No information is available on bioaccumulative potential.

12.4 Mobility in soil:

Mobility: No information is available on mobility in soil.

Results of PBT and vPvB assessment

PBT/vPvB: Mixture is inorganic and is not relevant for PBT or vPvB assessment

Other adverse affects: No other adverse effects are known.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

GHS P501-Dispose of contents/container according to applicable local/state/regional/federal regulations.

14 TRANSPORT INFORMATION

This product is not covered by international regulation of the transport of dangerous goods (IMDG, IATA, ADR, RID)

DOT: Not regulated

14.1 UN Number: Not regulated

14.2 UN proper shipping name: Not classified as dangerous goods under DOT and UN regulations.

14.3 Transport hazard class(es): Not regulated

14.4 Packing group: Not regulated.

Packaging group: Not regulated

14.5 Environmental hazards

Marine pollutant: Not regulated.

Environmentally hazardous substance: Not applicable.

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code: Not regulated.

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture.

OSHA Hazcom 2012, 29 CFR 1910.1200 and regulation (EC) No 1272/2008 (CLP) of the European Parliament

15.2 Chemical Safety Assessment: Not required.

For information on labeling go to section 2

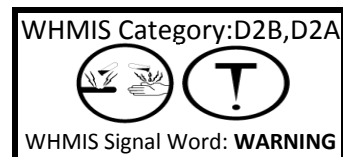
There are no TSCA 12b chemicals in this product

16 OTHER INFORMATION

Before using, read Scofield Tech-Data Bulletin TD-1100 for this product, the complete package label and this SDS and Warranty. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions

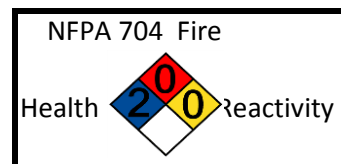
Wording of terms:

ACGIH	American Conference of Government Industrial Hygienists.
CAS No.	Chemical Abstract Service, unique chemical identifier
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
EC ₅₀	Effective Concentration that causes 50% mortality of population
EINECS	European Inventory of Existing Commercial Chemical Substances (EU)
GHS	Global Harmonization System, worldwide chemical safety program
LC ₅₀	Lethal Concentration that causes 50% mortality of population
LD ₅₀	Lethal Dose that causes 50% mortality of population
NFPA	National Toxicology Program
NTP	National Toxicology Program
OSHA	Occupational Safety & Health Administration
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible Exposure Limits
RCRA	Resource Conservation and Recovery Act
RE	Repeated Exposure
RQ	Reportable quantity
SARA III	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet (GHS replacement for MSDS)
SE	Single Exposure
STOT	Specific Target Organ Toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act



Hazardous Material Identification	
Health Hazard	2
Fire Hazard	0
Reactivity Hazard	0
Personal Protection	See Sec. 8 PPE

0 = minimal hazard, 4 = extreme hazard



0 = low hazard, 4 = high hazard

California Prop 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.

TWA Time Weighted Average
vPvB Very persistent and very bioaccumulative
WHMIS Workplace Hazardous Materials Information System (Canada)
SDS Issue Date: July 14, 2015

END OF SDS

LIMITED 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.