



BUILDING TRUST



L. M. Scofield Company - A SIKA COMPANY

## SOLACHROME® Integral Coloring Treatment for High-SRI Concrete - 1250

SDS 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:** SOLACHROME® Integral Coloring Treatment for High-SRI Concrete - 1250

**Chemical Name:** High-SRI Pigments: Complex Inorganic Color Pigment (CICP), and/or Titanium Dioxide (in some and/or Chromium III Oxide (in some formulations) and admixtures.

#### 1.2 Relevant identified uses of product

**SOLACHROME® High-SRI Integral Treatment for High-SRI Concrete** is mixture of high-SRI pigments designed to provide high SRI concrete in a wide range of colors and to enable LEED credits for solar reflectance.

SCOFIELD products are intended for use only by professionals.

**KEEP OUT OF THE REACH OF CHILDREN.**

#### 1.3 Details of the supplier of the safety data sheet:

**L. M. SCOFIELD® Company, A SIKA COMPANY**

**Scofield Phone: (800) 800-9900**

[www.scofield.com](http://www.scofield.com)

6533 Bandini Blvd, Los Angeles, CA 90040

Information Phone Number (323) 720-3000 M-F 8AM-5PM

4155 Scofield Road, Douglasville, GA 30134

Information Phone Number (770) 920-6000 M-F 8AM-5PM

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

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of substance or mixture:

GHS-US Hazard Classification

Skin irritant, STOT, SE, H313, category 5

Eye irritant, STOT, SE, H320, category 2B

Respiratory irritant, STOT, H335, category 3

Human Health: OSHA does not regulate Titanium Dioxide as a human carcinogen. IARC lists Titanium Dioxide as a class 2B carcinogen.

Environment: This product is not considered to be harmful to the environment.

GHS Category Key
1 = most hazardous
5 = least hazardous

#### 2.2 Label elements:

##### GHS Hazard (H) Statements

GHS Signal Word: None

##### Acute toxicity:

GHS Pictogram, None

Skin Irritant, STOT, SE, H313, Category 5

Eye Irritant, STOT, H320, Category 2B

Respiratory Irritant, STOT, H335, Category 3

##### Chronic toxicity:

Suspected of causing cancer, IARC, STOT, Inhalation, RE, H350, Category 2B.

IARC lists Titanium Dioxide as a category 2B possible carcinogen.



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### GHS Precautionary (P) Statements

P264--Wash after handling

### Prevention precautionary statements

P102--Keep out of the reach of children.

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

P280--Wear eye protection and face protection.

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

### Response precautionary statements

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

P305+P351+P338--**IF IN EYES:** Rinse cautiously with water for 15 minutes. Remove contacts if easy to do. Continue rinsing.

P337+P313--**IF EYE IRRITATION PERSISTS:** get medical advice/attention.

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

### Disposal precautionary statements

P501--Dispose of contents/container in accordance with applicable local/state/regional/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:** Various metal oxide pigments

### 3.2 Mixture

Components of Mixture, Formulas	CAS #	EINECS	Weight % range	Hazardous Material Statement
Proprietary Complex Inorganic Pigment, black	68909-59-5	272-713-7	0 - 99%	classified as non-hazardous, no specific data
Proprietary Complex Inorganic Pigment, brown	68412-38-4	270-185-2	0 - 99%	classified as non-hazardous, no specific data
Proprietary Complex Inorganic Pigment, others	Proprietary	Proprietary	0 - 99%	classified as non-hazardous, no specific data
Titanium Dioxide, TiO <sub>2</sub>	13463-67-7	236-675-5	0 - 99%	Titanium dioxide is an IARC Class 2B carcinogen.
Chromium III Oxide, Cr <sub>2</sub> O <sub>3</sub>	1308-38-9	215-160-9	0 - 99%	No known significant effects or critical hazards.

The exact percentages in this composition and the components have been withheld as confidential business information.

## 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, take person to emergency room/hospital and bring these instructions for doctor. Provide easy access to eye wash stations 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, call 911 or a Poison Center 1 (800) 222-1222 for instructions on first aid treatment.



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### 4.2 Most important symptoms and effects both acute and delayed:

Eye contact with product can cause irritation. If irritation persists after rinsing eye(s) continue rinsing. Then take person to emergency room for medical treatment.

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

### 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 under normal conditions.

Explosion Hazard: Product will not explode.

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. Refer to Section 8 for more information.

Protective equipment: Wear suitable eye protection and if ventilation is not adequate wear a particulate respirator.

### 6.2 Environmental precautions:

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

### 6.3 Methods and material containment and cleaning up:

Method of cleaning up: Avoid generating dust. Use a vacuum with a HEPA filtered exhaust or clean up with broom & shovel.

## 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.

### 7.2 Conditions for safe storage including any incompatibilities:

Store product in a dry shaded area.

### 7.3 Specific end uses:

This product is intended for use only by professionals to provide integral and permanent color and high-SRI for new concrete.



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### 8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control Parameters	Exposure Limits in Air		
	ACGIH TLV 8hr	OSHA PEL 8 hour PEL TWA	NIOSH REL (TWA)
Components of Mixture, Formulas			
Proprietary Complex Inorganic Pigment, black	No limit established	No limit established	No limit established
Proprietary Complex Inorganic Pigment, brown	No limit established	No limit established	No limit established
Proprietary Complex Inorganic Pigment, others	No limit established	No limit established	No limit established
Titanium Dioxide, TiO <sub>2</sub>	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup> respirable dust, 15 mg/m <sup>3</sup> total	2.4 mg/m <sup>3</sup> (fine)
Chromium III Oxide, Cr <sub>2</sub> O <sub>3</sub>	0.5 mg/m <sup>3</sup> as Cr	0.5 mg/m <sup>3</sup> as Cr	not listed

#### 8.2 Exposure controls:

Engineering measures: Use only with adequate ventilation. Use local exhaust ventilation or other engineering controls to keep exposure to airborne particulates below recommended limits.

#### 8.3 Individual protective measures:

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

Skin protection: Wear rubber gloves and clothing to protect skin.

Respiratory Protection: If dust level exceeds the OSHA PEL or other limit, wear a proper particulate respirator, N95 or P100.

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: Provide eye wash stations and emergency showers near work area.

#### Personal Protective Equipment



Respirator selection, particulate, N95,P100

### 9 PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information of basic physical and chemical properties

Property-Test	Value/Result
a) pH	11-12 when wet, Not applicable if dry
b) Color	varies
c) Odor	none
d) Freezing/Melting Point	not applicable
e) Flammability	not flammable
f) Flash Point	will not flash
g) Auto ignition Temperature	will not autoignite
h) Explosive Limits upper/lower	will not explode
i) Vapor pressure	not applicable
j) Viscosity	not applicable
k) Solubility in water	insoluble
l) VOC	0.0 g/L ( 0.0 lb./gal)
m) Specific Gravity, water = 1.0	2.8 to 4.5

9.2 Other information: No other information is available



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**10 STABILITY AND REACTIVITY**

- 10.1 Reactivity:** Not reactive
- 10.2 Chemical stability:** Product is stable under most common conditions
- 10.3 Possibility of hazardous reactions:** Hazardous reactions do not normally occur.
- 10.4 Conditions to avoid:** Avoid dust formation. No other conditions to avoid are known.
- 10.5 Incompatible materials:** Avoid strong oxidizers/acids. No other incompatible materials are known.
- 10.6 Hazardous decomposition products:** No hazardous decomposition products are known.

**11 TOXICOLOGICAL INFORMATION**

**Toxicological results of testing:**

NDA = No Data Available

Chemical Name	LD <sub>50</sub> rat oral	LC <sub>50</sub> Inhalation or water test (fish)	LC <sub>50</sub> Or EC <sub>50</sub> Other Exposure Route
Proprietary Complex Inorganic Pigment, black	NDA	NDA	NDA
Proprietary Complex Inorganic Pigment, brown	NDA	NDA	NDA
Proprietary Complex Inorganic Pigment, others	NDA	NDA	NDA
Titanium Dioxide, TiO <sub>2</sub>	>12,000 mg/kg	inhalation 6.8 mg/L, 4 hr, rat	10,000 mg/kg dermal, rabbit
Chromium III Oxide, Cr <sub>2</sub> O <sub>3</sub>	>10,000 mg/L	inhalation, 96 hours, rat	10,000 mg/L Danio rerio 96 hours

- Toxicity:**
- a) acute toxicity, Not classified as an acutely toxic material.
  - b) skin corrosion/irritation, Product mixtures can cause skin irritation.
  - c) eye damage/irritation, Product can cause eye damage (as a mechanical irritant, do not rub eyes).
  - d) respiratory or skin sensitization, Not classified as a respiratory sensitizer or skin sensitizer.
  - e) germ cell mutagenicity, Product does not cause germ cell mutagenicity.
  - f) carcinogenicity by agency: National Toxicity Program (NTP) status: IARC lists Titanium Dioxide as a class 2B carcinogen. Studies were conducted with rats exposed to 250 mg/m<sup>3</sup> of respirable titanium dioxide for 6 hours per day, 5 days per week and for 2 years. This level of TiO<sub>2</sub> overloaded the rats lungs and overwhelmed their clearance mechanism. In this study 13% of the rats developed microscopic lung tumours. Further studies indicated that the rat's tumors only occurred under particle overload and only with rat species. Further equivalent testing with hamsters and mice did not cause carcinogenicity.
  - g) reproductive toxicity, Product does not cause or contribute to reproductive toxicity.
  - h) STOT-single exposure, Product can cause eye damage due to abrasion and irritation.
  - i) STOT-repeated exposure, Product has no known chronic effects. TiO<sub>2</sub> is a possible IARC Class 2B carcinogen.
  - J) aspiration hazard, Product is not an aspiration hazard.



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- 11.1 Inhalation:** Acute: Product dust can irritate throat and respiratory system and cause coughing.
- 11.2 Skin contact:** Product may have an irritating effect on skin.
- 11.3 Eye contact:** Product can cause serious eye damage. Immediate first aid is required for eye contact.
- 11.4 Ingestion:** Product ingestion may cause irritation of the mouth, esophagus and gastrointestinal tract.
- 11.5 Specific effects:** Frequent inhalation of dust over a long period of time increases the risk of developing lung disease.

### 12 ECOLOGICAL INFORMATION

Components of Mixture	Aquatic toxicity fish			Aquatic toxicity invertebrates		
	LC <sub>50</sub> or *LC <sub>0</sub>	Species	Duration	EC <sub>50</sub> or *EC <sub>0</sub>	Species	Duration
Proprietary Complex Inorganic Pigment, black	NDA	NDA	NDA	NDA	NDA	NDA
Proprietary Complex Inorganic Pigment, brown	NDA	NDA	NDA	NDA	NDA	NDA
Proprietary Complex Inorganic Pigment, others	NDA	NDA	NDA	NDA	NDA	NDA
Titanium Dioxide Pigment	>1,000 mg/L	Pimphales prom.	96 hours	>1000 mg/L	Daphnia magna	48 hours
Chromium III Oxide Pigment	>10,000 mg/L	Danio rerio	96 hours	NDA	NDA	NDA

NDA = No Data Available

- 12.1 Ecotoxicity** This product is not expected to be hazardous to the aquatic environment.
- 12.2 Persistence and degradability:**
  - Degradability: This product is inorganic and is not degradable and is also not biodegradable.
- 12.3 Bio accumulative Potential:**
  - Bio accumulative 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: Mixture is mostly 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 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



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**Packaging group:** Not regulated

**14.5 Environmental hazards**

Marine pollutant: Not regulated

Environmentally hazardous substance: Not applicable

**14.6 Special precautions for user:** None are 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 refer to section 2.

There are no TSCA 12b chemicals in this product

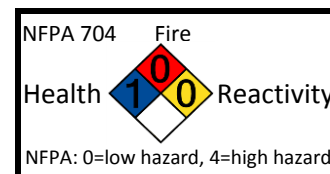
**16 OTHER INFORMATION**

**Wording of terms:**

- ACGIH American Conference of Government Industrial Hygienists
- CAS Chemical Abstract Service, unique identification code for chemicals
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act
- CLP Classification, Labeling and Packaging, EC 1272/2008
- EC<sub>0</sub> Highest effective concentration that has no mortality of population
- EC<sub>50</sub> Effective Concentration that causes 50% mortality of population
- EINECS European Inventory of Existing Commercial Chemical Substances
- GHS Global Harmonization System, worldwide chemical safety program.
- IARC International Agency for Research on Cancer
- HazCom Hazard Communication, US OSHA GHS 29 CFR 1910.1200
- LC<sub>0</sub> Highest Concentration with no mortality of population
- LC<sub>50</sub> Lethal Concentration that causes 50% mortality of population
- LD<sub>50</sub> Lethal Dose for a chemical that causes 50% mortality of population
- MARPOL International Convention for the Prevention of Pollution from Ships
- NFPA National Fire Prevention Association
- NIOSH National Institute for Occupational Safety and Health
- OSHA Occupational Safety and Health Administration
- PBT Persistent, Bio accumulative and Toxic
- PEL Permissible Exposure Level
- RCRA Resource Conservation and Recovery Act
- RE Repeated Exposure

Hazardous Material Information	
Health Hazard	1
Flammability Hazard	0
Physical Hazard	0
Personal Protective Equipment	See sec. 8 PPE

0=minimal hazard. 4 = extreme 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.**



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### Wording of terms:

REACH	Registration, Evaluation, Authorization and Restrictions of Chemicals, EC/1907/2006
REL	Recommended Exposure Limit
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
TWA	Time Weighted Average
VOC	Volatile Organic Compound
vPvB	Very Persistent and Very Bioaccumulative
WHMIS	Workplace Hazardous Materials Information System (Canada)

WHMIS Signal Word: None

WHMIS Classification: None

The details in this document are based on our current knowledge and experience and are only for this product and only in regard to safety requirements. Refer to SCOFIELD® Tech Data Bulletin TD-1250, SOLACHROME® Integral Coloring Treatment for High-SRI Concrete - 1250. SCOFIELD® Tech-Data Bulletins and SDSs are available at: [www.scofield.com](http://www.scofield.com)

SDS Issue date: January 15, 2015. Updated to include SIKA Company trademark, November 29, 2016.

END OF SDS

### LIMITED WARRANTY

L. M. Scofield Company (Scofield) represents and warrants only that its products are of consistent quality and 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.