

**SCOFIELD
SYSTEMS**

Safety Data Sheet & Warranty

CHROMIX® P1200 Admixtures for Color-Conditioned® Concrete, SCOFIELD® Integral Color SG 7200, SCOFIELD® Integral Color Utility Grade 7100, and SOLACHROME® Integral Coloring Treatment 1250

5/26/2015 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: CHROMIX® Admixtures for Color-Conditioned® Concrete P1200 (all colors), SCOFIELD® Integral Color SG 7200, SCOFIELD® Integral Color Utility Grade 7100 and SOLACHROME® Integral Coloring Treatment 1250

Chemical Name: Mixtures of pigments (iron oxides and/or titanium dioxide and/or chromium III oxide and/or cobalt blues) and/or Complex Inorganic Color Pigments, with pozzolans and admixtures.

1.2 Relevant identified uses of product:

CHROMIX® Admixtures for Color-Conditioned® Concrete P1200, SCOFIELD® Integral Color SG 7200, SCOFIELD® Integral Color Utility Grade 7100 and SOLACHROME® Integral Coloring Treatment 1250, are pigments and admixtures that are designed to permanently color concrete and other cementitious materials. 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

6533 Bandini Blvd, Los Angeles, CA 90040

4155 Scofield Road, Douglasville, GA 30134

Scofield Phone #: (800) 800-9900

www.scofield.com

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

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, RE, H335, category 3

Carcinogenicity, STOT, RE, H350, inhalation, category 1A, 1B

Carcinogenicity, STOT, RE, H351, inhalation, IARC category 2B

Central nervous system damage, STOT, RE, H373, category 2

Human Health: Product can damage eyes by mechanical irritation. Avoid getting product into eyes.

Environment: Product is not considered to be dangerous to the environment.

2.2 Label elements:

Hazard (H) Statements

Acute toxicity



Signal Word: **WARNING**

GHS Category Key

1 = Most Hazardous

5 = Least Hazardous

H313--May be harmful in contact with skin

H336--Causes eye irritation

Chronic Toxicity

H350--May cause cancer, STOT, lungs, RE, category 1A, contains respirable silica, repeated exposure may cause (silicosis).

H351--Suspected of causing cancer, IARC lists titanium dioxide as a category 2B possible carcinogen.

H373--May cause damage to central nervous system, STOT, RE, inhalation, category 2.

GHS Precaution (P) Statements:

Prevention precautionary statements

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

P284--Wear respiratory protection, see sec. 8

Response precautionary statements

P264--Wash after handling.

P305+P351+P338--IF IN EYES: Rinse cautiously with water for several minutes, remove contacts if easy to do. Continue rinsing.

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

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, Formula	CAS #	EINECS #	Weight %
Iron Oxide Pigment Red, Fe_2O_3	1309-37-1	215-168-2	0-99%
Iron Oxide Pigment Yellow, $\text{FeO}\cdot\text{OH}$	51274-00-1	257-098-5	0-99%
Iron Oxide Pigment Black, Fe_3O_4	1317-61-9	215-277-5	0-99%
Manganese(an impurity in black iron oxide)	7439-96-5	231-105-1	0-3%
Titanium Dioxide Pigment White, TiO_2	13463-67-7	236-675-5	0-99%
Chromium III Oxide Green Pigment, Cr_2O_3	1308-38-9	215-160-9	0-99%
Cobalt Aluminate Blue Pigment, CoAl_2O_4	1345-16-0	215-610-5	0-99%
Cobalt Chromite Blue Pigment CoCr_2O_4	68187-11-1	260-072-0	0-99%
Complex Inorganic Color Pigment, black	68909-79-5	272-713-7	0-99%
Complex Inorganic Color Pigment, brown	68412-38-4	270-185-2	0-99%
Complex Inorganic Color Pigments, all colors	Proprietary	Proprietary	0-99%
Flyash, Coal Combustion Residuals	68131-74-8	931-322-8	0-50%
Crystalline Silica Quartz (from flyash)	14808-60-7	238-878-4	<1% respirable

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 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.

Irritation: May cause irritation of mouth, throat, esophagus and gastrointestinal tract. Do not induce vomiting. Give large amounts of water to drink. Call a POISON CONTROL CENTER (800) 222-1222 or 911 to obtain first aid information.

4.2 Most important symptoms and effects both acute and delayed:

Eye contact can cause irritation. If irritation persists after rinsing eyes, take person to emergency room for treatment and bring these instructions (SDS) for doctor. Repeated exposure to respirable silica over long periods can cause cancer (silicosis).

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

Refer to SECTION 11 for more detailed information on health effects and symptoms.

Primary routes of entry include: Eye Contact, Skin Contact, Dust Inhalation

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.

Other Hazards: Black iron oxide compositions can oxidize via exothermic reaction when exposed to fire.

5.3 Advice for fire-fighting: Use normal fire fighting equipment.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions :

General measures: Use personal protective equipment. Refer to section 8 for additional information.

Protective equipment: Wear suitable respiratory protection, eye protection and rubber gloves.

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:

Avoid generating dust. Use a vacuum with a HEPA filtered exhaust or clean up carefully with a broom/shovel.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling:

Always wash hands immediately after handling product. Do not eat or drink in area where product is being used.

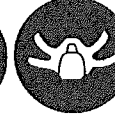
7.2 Conditions for safe storage including any incompatibilities:

Store product in shade. Product may contain black iron oxide, which can start to oxidize above 176 °F (80 °C) liberating heat

7.3 Specific end uses:

This product is intended for use only by professionals to integrally color new architectural concrete.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control Parameters				Exposure Limits in Air			Personal Protective Equipment  Respirator Selection: Particulate/Mist Filter
Components of Mixture, Formula				ACGIH TLV 8hr	OSHA PEL 8hr	NIOSH REL TWA	
Iron Oxide Pigment Red, Fe ₂ O ₃				5 mg/m ³	10 mg/m ³	No Data Available	
Iron Oxide Pigment Yellow, FeO·OH				5 mg/m ³	10 mg/m ³	No Data Available	
Iron Oxide Pigment Black, Fe ₃ O ₄				5 mg/m ³	10 mg/m ³	No Data Available	
Manganese (Impurity in Black Iron Oxide)				0.2 mg/m ³	5 mg/m ³	No Data Available	
Titanium Dioxide Pigment White, TiO ₂				10 mg/m ³	15 mg/m ³	No Data Available	
Chromium III Oxide Green Pigment, Cr ₂ O ₃ as C				0.5 mg/m ³ 8hr	0.5 mg/m ³ 8hr	No Data Available	

Cobalt Aluminate Blue Spinel, CoAl_2O_4	0.3 mg/kg (Co)	1 mg/m ³	0.5 mg/m ³
Cobalt Chromite Blue Spinel, CoCr_2O_4	0.5 mg/kg	1 mg/m ³	0.5 mg/m ³
Complex Inorganic Color Pigment, black	NLE	NLE	NLE
Complex Inorganic Color Pigment, brown	NLE	NLE	NLE
Complex Inorganic Color Pigments, all colors	0.1 mg/m ³	0.1 mg/m ³	NLE
Flyash, Coal Combustion Residuals	Not Applicable	Not Applicable	No Data Available
Crystalline Silica (in flyash) Respirable	0.025 mg/kg	10/(%SiO ₂ +2)	0.05 mg/m ³ 40 hr

NLE = No Limit Established

8.2 Exposure controls:

Engineering measures: Use only with adequate ventilation.

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 dust-filter 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.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information of basic physical and chemical properties

Property-Test	Value/Result
a) pH	not applicable
b) Color	various colors
c) Odor	no odor
d) Freezing/Melting Point	not applicable
e) Boiling Range	not applicable
f) Flash Point	not applicable
g) Auto ignition Temperature	not applicable
h) Upper Explosive Limits UEL	not applicable
i) Lower Explosive Limits LEL	not applicable
j) Flammability (solid)	not flammable
k) Vapor Pressure	not applicable
l) Vapor density vs air = 1.0	not applicable
m) Density	Bulk density varies with color very low (only admixture portion is soluble)
n) Solubility in water	soluble)
o) KOW Partition Coefficient	not applicable
p) Evaporation Rate	not applicable
q) Viscosity	not applicable
r) VOC	0.0 g/L (0.0 lb/gal)
s) Specific Gravity, water = 1.0	2.8 to 4.5

9.2 Other information: No other information is available

10 STABILITY AND REACTIVITY

10.1 Reactivity: Not reactive

- 10.2 Chemical stability:** Product can react with strong acids.
- 10.3 Possibility of hazardous reactions:** Hazardous reactions do not normally occur.
- 10.4 Conditions to avoid:** Avoid contact with strong acids
- 10.5 Incompatible materials:** Strong acids
- 10.6 Hazardous decomposition products:** No hazardous decomposition products are known. Black iron oxide can start to decompose (via exothermic oxidation) if over 176 °F (80 °C).

11 TOXICOLOGICAL INFORMATION

Toxicological results of testing

Chemical Name	LD ₅₀ (Rat oral)	LC ₅₀ Inhalation	LC ₅₀ Other Exposure Route
Iron Oxide Pigment Red, Fe ₂ O ₃	>5,000 mg/kg	>210 mg/m ³ (rat) 2 weeks	50 mg, 7 days, rabbit, edema of eyes
Iron Oxide Pigment Yellow, FeO·OH	>10,000 mg/kg	195 mg/m ³ , 2 weeks duration, rat	Dermal, skin, not sensitizing guinea pig
Iron Oxide Pigment Black, Fe ₃ O ₄	>5,000 mg/kg	No Data Available	Slight or no skin irritation, rabbit
Manganese (impurity in black iron oxide)	>5,000 mg/kg	No Data Available	No Data Available
Titanium Dioxide Pigment White, TiO ₂	>5,000 mg/kg	6.82 mg/L, 4 hr, rat	No Data Available
Chromium III Oxide Green Pigment, Cr ₂ O ₃	>5,000 mg/kg	5.41 mg/L (as dust)	LD ₅₀ , Dermal, skin, no irritation, rabbit
Cobalt Aluminate Blue Spinel, CoAl ₂ O ₄	>10,000 mg/kg	not tested	no other exposure routes were tested
Cobalt Chromite Blue Spinel, CoCr ₂ O ₄	>10,000 mg/kg	not tested	no other exposure routes were tested
Complex Inorganic Color Pigment, black	NDA	No Data Available	No Data Available
Complex Inorganic Color Pigment, brown	NDA	No Data Available	No Data Available
Complex Inorganic Color Pigments, all colors	NDA	No Data Available	No Data Available
Flyash, Coal Combustion Residuals	>2,000 mg/kg	>2.2 mg/L, 1 hr, rat	No Data Available
Crystalline Silica (in flyash)	500 mg/kg	No Data Available	No Data Available

- a) acute toxicity, Not classified as an acutely toxic material.
- b) skin corrosion/irritation, Pigment mixtures can cause skin irritation.
- c) eye damage/irritation, Pigment mixtures 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: Crystalline silica (respirable) is a known human carcinogen. IARC lists Titanium Dioxide as a class 2B carcinogen. All other components of this product, present at 0.1% or more have not been identified by ACGIH or OSHA as probable, possible or confirmed carcinogens.
- g) reproductive toxicity, Product does not cause or contribute to reproductive toxicity
- h) STOT-single exposure, Product can cause eye damage due to abrasion.
- i) STOT-repeated exposure, Product dust can cause silicosis (lung injury) after repeated exposure over long periods.
- J) aspiration hazard, Product is not an aspiration hazard.

11.1 Inhalation: Acute Product may irritate throat and respiratory system and cause coughing.

Chronic: Product contains <1% respirable silica. Prolonged or repeated exposure may cause cancer (silicosis).

11.2 Skin contact: Product may have an irritating effect on skin.

11.3 Eye contact: Pigment mixtures can cause serious eye damage. Immediate first aid is required.

11.4 Ingestion: 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

1 Toxicity:	Aquatic Toxicity Fish			Aquatic Toxicity Invertebrates		
	LC ₅₀ or *LC ₀	Species	Duration	EC ₅₀ or *EC ₀	Species	Duration
Components of Mixture						

Iron Oxide Pigment Red	*50,000 mg/L	Danio rerio	96 hr	>100 mg/L	Daphnia magna	48 hr
Iron Oxide Pigment Yellow	*>10,000 mg/L	Danio rerio	96 hr	>100 mg/L	Daphnia magna	48 hr
Iron Oxide Pigment Black	*>10,000 mg/L	Danio rerio	96 hr	>10,000 mg/L	Daphnia magna	48 hr
Manganese (impurity in black iron oxide)	NDA	NDA	NDA	NDA	NDA	NDA
Titanium Dioxide Pigment White	>1,000 mg/L	Pimphales prom.	96 hr	>1,000 mg/L	Daphnia magna	48 hr
Chromium III Oxide Green Pigment	>10,000 mg/L	Danio rerio	96 hr	NDA	NDA	NDA
Cobalt Aluminate Blue Spinel, CoAl ₂ O ₄	NDA	NDA	NDA	NDA	NDA	NDA
Cobalt Chromite Blue Spinel, CoCr ₂ O ₄	14.3 mg/L	Cyprinus Carpio	48 hr	0.01-0.7 mg/L	Daphnia magna	48 hr
Complex Inorganic Color Pigment, black	NDA	NDA	NDA	NDA	NDA	NDA
Complex Inorganic Color Pigment, brown	NDA	NDA	NDA	NDA	NDA	NDA
Complex Inorganic Color Pigments, all colors	NDA	NDA	NDA	NDA	NDA	NDA
Flyash, Class C, Coal Combustion Residuals	*5,000 mg/L	Danio rerio	96 hr	2,000 mg/L	Daphnia magna	24 hr
Crystalline Silica (from flyash)	>10,000 mg/L	Cyprinus Carpio	72 hr	NDA	NDA	NDA

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

NDA = No Data Available

12.2 Persistence and degradability:

Degradability: Product 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 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 local/state/regional/federal regulations.

14 Transport information

This product is not covered by international regulation of the transport of dangerous goods.

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 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.

SAHA 302 extremely hazardous substances, not listed

SARA Title III 311/312/313 listed as a hazardous substances

There are several chemicals that are TSCA 12b listed

Right to Know, regulated chemicals, MA, NJ, PA and RI

16: OTHER INFORMATION

Wording of terms:

ACGIH	American Conference of Government Industrial Hygienists
CAS No.	Chemical Abstract Service, unique identification code for chemicals
CLP	Classification, Labeling and Packaging, EC 1272/2008
EC ₀	Highest effective concentration that has no mortality of population
EC ₅₀	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 ₀	Highest Concentration with no mortality of population
LC ₅₀	Lethal Concentration that causes 50% mortality of population
LD ₅₀	Lethal Dose for a chemical that causes 50% mortality of population
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NL	No Limit Established
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible Exposure Level
RE	Repeated Exposure
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
US DOT	United States Department of Transportation
VOC	Volatile Organic Compound
vPvB	Very Persistent and Very Bioaccumulative
WHMIS	Workplace Hazardous Materials Information System (Canada).

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.

SDS issue date: May 28, 2015

Before using, read the appropriate Scofield Tech-Data Bulletin: CHROMIX® P Admixtures for Color-Conditioned Concrete TD-1200, SCOFIELD Integral Color TD-7200, SCOFIELD Integral Color Utility Grade TD7100 or SOLACHROME Integral Coloring Treatment TD-1250, for all colors, the complete package label & this Safety Data Sheet (SDS) and Warranty.

END OF SDS

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

WHMIS Signal Word: **WARNING**



WHMIS Classification: **D2A**

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.

NFPA 704 Fire



0=low hazard, 4=high hazard

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.