



SAFETY DATA SHEET

Issue Date 11-Aug-2015

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Version 1

MTC

Overlay Liquid Colorant

1. IDENTIFICATION

Product identifier

Product Name Overlay Liquid Colorant

Other means of identification

Product Code MTC

Recommended use of the chemical and restrictions on use

Recommended Use Coloring agent for Concrete.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Solomon Colors, Inc.
4050 Color Plant Road
Springfield, IL 62702

Manufacturer Address

Solomon Colors, Inc.
4050 Color Plant Road
Springfield, IL 62702

Company Phone Number 800-624-0261 (US & Canada); 217-522-3112 (Outside North America)

24 Hour Emergency Phone Number 800-373-7542

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

Hazard statements

Do not allow product to dry. Dried product may be harmful if inhaled.

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Viscous

Physical state Liquid

Odor Characteristic

Precautionary Statements - Prevention

Obtain special instructions before use

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

Use personal protective equipment as required

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

May cause eye irritation. May cause: tearing, redness, discomfort.

If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store in accordance with local regulations

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other Information****3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	Weight-%	Trade Secret
Silicates - Blend	Proprietary	5-85	*
Yellow Iron Oxide	51274-00-1	0-100	*
Titanium Dioxide	13463-67-7	0-100	*
Red Iron Oxide	1309-37-1	0-90	*
Chrome Oxide	1308-38-9	0-50	*
Black Iron Oxide	1317-61-9	0-100	*
Proprietary Dispersant	Proprietary	1 -10	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**Description of first aid measures****General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. (Get medical attention immediately if irritation persists.).

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Ingestion

Clean mouth with water. Remove from exposure, lie down. Do not induce vomiting without medical advice. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Avoid creating dust. Evacuate personnel to safe areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Vacuum or sweep up material and place in a designated labeled waste container. Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

Methods for cleaning up With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Take up with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep from freezing. Keep cool. Protect from sunlight. Store at temperatures not exceeding 80 °C/ 176 °F.

Incompatible materials Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. The TWA limits are set for Iron or Iron Oxide fumes. The Iron Oxide pigments do not contain any Iron or Iron Oxide fumes.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Red Iron Oxide 1309-37-1	TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ fume and total dust Iron oxide (vacated) TWA: 5 mg/m ³ respirable fraction regulated under Rouge	IDLH: 2500 mg/m ³ Fe dust and fume TWA: 5 mg/m ³ Fe dust and fume
Chrome Oxide 1308-38-9	TWA: 0.5 mg/m ³ Cr	TWA: 0.5 mg/m ³ Cr (vacated) TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III) TWA: 0.5 mg/m ³ Cr

Appropriate engineering controls

Engineering Controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing. Protective shoes or boots.

Respiratory protection In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Characteristic
Appearance	Viscous	Odor threshold	Not applicable
Color	Various		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8.0 - 10.0	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	4.0 - 5.0	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	

Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Product does not present an acute toxicity hazard based on known or supplied information. Dried product might be harmful if inhaled.
Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause mechanical irritation (abrasion).
Skin Contact	May cause mechanical irritation (abrasion).
Ingestion	No known effect based on information supplied.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Red Iron Oxide 1309-37-1	> 10000 mg/kg (Rat)	-	-
Black Iron Oxide 1317-61-9	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity This product might contain up to 100% Titanium Dioxide. In 2006, the International Agency for Research on Cancer (IARC) evaluated TiO₂ as “possibly carcinogenic to humans” (Group 2B) based primarily on studies in rats. Inhalation exposures to TiO₂ in rats can result in lung effects and lung tumors. However, it is generally recognized that the rat is uniquely sensitive to the effects of “lung overload” which is not observed in other species including humans (Ref. 6). These facts are supported by the results from four large epidemiology studies involving more than 20,000 workers in the titanium dioxide manufacturing industry in North America and Europe which indicate no association with an increased risk of cancer or with any other adverse lung effects (Ref. 1,2,3,4,5,7). These studies did not specifically differentiate between the ultrafine and pigmentary TiO₂.
 References: 1. Boffetta P, Gaborieau V, Nadon L, Parent M-E, Weiderpass E, Siemiatycki J. (2001). Exposure to titanium dioxide and risk of lung cancer in a population-based study from Montreal. *Scand. J. Work Environ. Health* 27:227-232. 2. Boffetta P., Soutar A., Cherrie J., Granath F., Andersen A., Anttila A., Blettner M., Gaborieau V., Klug S., Langard S., Luce D., Merletti F., Miller B., Mirabelli D., Pukkala E., Adami H-O., and Weiderpass E. (2004). Mortality among workers employed in the titanium dioxide industry in Europe. *Cancer Causes and Control* 15(7):697-706. 3. Chen J, and Fayerweather W. (1988). Epidemiologic study of workers exposed to titanium dioxide. *J. Occup. Med.* 30(12):937-42. 4. Fryzek J, Chadda B, Marano D, White K, Schweitzer S, McLaughlin J, and Blot W. (2003). A cohort mortality study among titanium dioxide manufacturing workers in the United States. *J. Occup. Environ. Med.* 45(4): 400-09. 5. Garabrant D.H., Fine L.J., Oliver C., Bernstein L., and Peters J.M. (1987). Abnormalities of pulmonary function and pleural disease among titanium metal production workers. *Scand. J. Work Environ. Health* 13(1):47-51. 6. Levy L. S. (1994). Squamous Lung Lesions Associated with Chronic Exposure by Inhalation of Rats to p-Aramid Fibrils (Fine Fiber Dust) and to Titanium Dioxide: Findings of a Pathology Workshop. In: Mohr, U (Ed), *Toxic and carcinogenic effects of solid particles in the respiratory tract*, ILSI Press, 473-478. 7. Ramanakumar AV, Parent ME, Latreille B, Siemiatycki J. (2008). Risk of lung cancer following exposure to carbon black, titanium dioxide and talc: results from two case-control studies in Montreal. *Int J Cancer* 122:183-9. This product may contain up to 50% Chromium Oxide (III). This material may contain approximately 100 ppm hexavalent Chromium. Chromium hexavalent (VI) compounds are known to be human carcinogens based on sufficient evidence of carcinogenicity from studies in humans.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7	-	Group 2B	-	X
Red Iron Oxide 1309-37-1	-	Group 3	-	-
Chrome Oxide 1308-38-9	-	Group 3	-	-

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 19520 mg/kg
ATEmix (dermal) 16216 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability
 No information available.

Bioaccumulation
 No information available.

Other adverse effects No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes This material, as supplied, is not a hazardous waste according to state and federal regulations (40 CFR 261). Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Chrome Oxide 1308-38-9	Toxic Corrosive Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Chrome Oxide - 1308-38-9	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Chrome Oxide 1308-38-9	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide 13463-67-7	X	X	X
Red Iron Oxide 1309-37-1	X	X	X

Chrome Oxide 1308-38-9	X	X	X
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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA **Reactivity** 0 **Physical and Chemical** **HMIS** **Health hazards** 1
Flammability 0 **Physical hazards** 0 **Properties -**
Personal protection X

Issue Date 11-Aug-2015
Revision Date 11-Aug-2015
Revision Note
No information available

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.

End of Safety Data Sheet