

MATERIAL SAFETY DATA SHEET

BLENDING COLORS- BLUES, GREENS., BC-12, BC-16, BC-28

SECTION 01: PRODUCT IDENTIFICATION

Product Identifier:	Mixture of Phthalocyanine Copper, Iron Oxide and Titanium Dioxide
Product Use:	Concrete Color,
Manufacturer's Name:	Concrete Chemical Technologies, #190, 6260 Graybar Road, Richmond, BC, V6W 1H6, Canada, Emergency Telephone Number: 1 604 789 2550
Supplier's Name	Concrete Chemical Technologies, #190, 6260 Graybar Road, Richmond, BC, V6W 1H6, Canada, Emergency Telephone Number: 1 604 789 2550
Preparation Date of MSDS:	November 25 th , 2003
Revision Date of MSDS:	May 19 th , 2010
MSDS Prepared By:	Farhad Kazemian
Phone Number of Preparer:	1 877 952 0057

SECTION 02: HAZARDOUS INGREDIENTS

Ingredients:	%	CAS#	LD/50	ACGIH TLV	Comments
Iron Oxide	16-71	1309-37-1	5500 mg/kg (Oral Rat)	10 mg/m3	NA
Phthalocyanine Copper	0-83	147-14-8	5000 mg/kg (Oral Rat)	NA	NA
Titanium Dioxide	0-33	13463-67-7	25000 mg/kg (Oral Rat)	10 mg/m3	6.82 mg/1 (4hr) (Inhalation rabbit) Dermal

SECTION 03: HAZARDOUS IDENTIFICATION

Route of Entry:	Skin= Yes, Eye Contact= Yes ,Inhalation= Yes, Ingestion= No,
Skin Contact:	Possible Irritation
Skin Absorption:	Not Established
Eye Contact:	Eye contact by larger amounts of powder may cause moderate eye irritation.
Inhalation:	Dust can cause lung irritation, coughing or sneezing.
Ingestion:	No adverse effects expected.
Emergency Overview:	CAUTION! When involved in a fire or exposed to high temperatures for an extended period of time, organic pigments may smolder or burn evolving noxious fumes, which can include oxides of nitrogen and carbon, other toxic compounds.
WHMIS Symbols:	Not Controlled
Potential Health Effects:	Repeated and prolonged exposures to iron oxide dust may cause a benign pneumoconiosis called siderosis.

SECTION 04: FIRST AID MEASURES

Skin Contact:	Wash with soap and water immediately and rinse thoroughly. If irritation persists consult a physician.
Eye Contact:	Remove any contact lenses at once. Flush eyes with water for 10-15 minutes. If eye irritation persists, get immediate medical attention.
Inhalation:	Remove to fresh air if swallowed. If not breathing, trained personnel should initiate artificial respirations and immediate medical attention should be obtained,
Ingestion:	If large quantities are ingested, seek medical advice.

SECTION 05: FIRE FIGHTING MEASURES

Flammable (Yes / No)	No
Yes	When involved in a fire or exposed to high temperatures for an extended period of time, organic pigments may smolder or burn evolving noxious fumes, which can include oxides of nitrogen and carbon, other toxic compounds.

MATERIAL SAFETY DATA SHEET

Flash Point (°C / Method)	NA
Lower Flammable Limit (% by Volume)	NA
Autoignation Temperature (°C)	NA
Explosion Data- Sensitivity to Impact	NA
Explosion Data- Sensitivity to Static Discharge	Improper handling of any finely divided organic pigment powder may lead to dust cloud formation which may be an explosion hazard
Hazardous combustion Products	Fire or excessive heat may produce hazardous decomposition products.
Special Fire Fighting Procedures	Use appropriate extinguishing media for surrounding fire. May be subject to slow oxidation if stored at temperatures above 60 C (140 F). If oxidation should occur, heat will be liberated which could cause surrounding combustibles to burn.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures	Small Spill: For dry powder spills, inert materials such as sand may be added to control dusting prior to cleanup. Industrial grade vacuum sweepers are also recommended. Place spilled material into appropriate waste containers for disposal. Large Spill: Contain spilled material immediately with an inert substance such as sand or earth. Use plastic or aluminum shovel to transfer diluted waste material into appropriate containers for disposal. Airborne organic pigment dust may be an implosion hazard. Secure possible sources of ignition and avoid dusting.
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SECTION 07: HANDLING AND STORAGE

Handling Procedures and Equipment	Maintain good personal hygiene. Avoid breathing dust. Wash thoroughly after handling. Wash or vacuum clothing that may have become dusty. Ventilate adequately, otherwise wear an appropriate breathing apparatus.
Storage requirements	Store in cool, dry, well ventilated area, removed oxidizing agents, acids, carbon monoxide, food stuffs. Ensure containers are adequately labeled and protected from physical damage.

SECTION 08: EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limit	ACGIH TLV	10 mg/m ³
	OSHA PEL	NA
	Other	NA
Engineering Controls	General	Ensure natural adequate ventilation in work area.
	Local Exhaust	Local exhaust ventilation as necessary to control any air contaminants, to within their TLVs.
	Other	Minimize dust generation and exposure.
Personal Protective Equipment	Gloves	Rubber or PVC gloves
	Respirator	A canister type respirator may be necessary if excessive dust is generated. A NIOSH approved organic vapor mask with a dust/mist pre-filter is recommended.
	Eye	Wear dust-proof goggles
	Footwear	Safety Shoes
	Clothing	When using large quantities or where heavy contamination is likely, wear long sleeve coveralls.
Hazard Index		H= 2, F= 0, R=0

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Powder
Odor and Appearance	No odor, Green and blue powdery appearance
Odor Threshold (ppm)	NA

MATERIAL SAFETY DATA SHEET

Specific Gravity	2.09- 3.50 H ₂ O= 1)
Vapor Density (air = 1)	NA
Vapor Pressure (mmHg)	NA
Evaporation Rate	NA
Flammability Class	Non-flammable
Boiling Point °C	NA
Melting Point °C	NA
Volatile % By Weight	1.5 % max.
PH	5.0-7.0
Coefficient of Water / Oil Distribution	NA
Solubility in Water	NA

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable, under normal condition
Incompatibility With Other Substances	Incompatible with oxidizing agents (eg. Hypochlorite's, peroxides), acids (eg. Hydrochloric acid) and carbon monoxide.
Reactivity	If stored above 60°C hazardous polymerization will occur.
Hazardous Decomposition Products	NA

SECTION 11: TOXICOLOGICAL INFORMATION

Effects on Acute Exposure	Refer to route of entry, Section 3
Effects on Chronic Exposure	Prolonged inhalation of iron oxide dust is known to produce a condition known as siderosis. On X-rays it appears to be a benign pneumoconiosis and is not associated with pulmonary fibrosis or disability unless there is concurrent exposure to other fibrosis-producing materials such as silica.
Irritancy of Product	Mild irritant
Skin Sensitization	No adverse effects expected.
Respiratory sensitization	NA
Eye Sensitization	Possible irritation, dust may cause mechanical irritation.
Ingestion	No adverse effects expected. If conscious give large quantities of water to induce vomiting. Get medical attention.
Carcinogenicity	In an inhalation study, a toxicological lab found evidence of lung cancer (malignant tumors) in one out of every 77 male rats and 13 out of 74 female rats after they were exposed to 250mg/m ³ Titanium Dioxide repairable dust for a two-year period. No compound related tumors were found in rats at the 10 or 50mg/m ³ exposure levels. The exposure level of 250 mg/m ³ is approximately 50 times that permitted in an occupational environment. To our knowledge, no such results have been experienced by humans. The National Cancer Institute (NCI) conducted a feeding study in rats and mice in which either 25000 or 50000 ppm titanium dioxide was given in their diet for two years. Under the conditions of the NCI test, titanium dioxide did not cause cancer by the oral route. Not listed as a carcinogen by NTP, IARC and OSHA. Not listed as a carcinogen.
Other Toxicity Information	NA
IARC (1,A2 or 2B)	Not listed
ACGIH (A1, A2 or A3)	NA
Reproductive Toxicity	No reproductive effects.
Teratogenicity	Not Established
Embryotoxicity	Not Established
Mutagenicity	Not Established
Name of Synergistic Products / Effects	NA

MATERIAL SAFETY DATA SHEET

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity	NA
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SECTION 13: DISPOSABLE CONSIDERATION

Waste Disposal	For small amounts, cover with moist sand or similar, collect and dispose of to an approved landfill site. Avoid generating dust. Contact manufacturer for additional information.
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SECTION 14: TRANSPORT INFORMATION

Special Shipping Information	NA
PIN	Not Regulated
TDG	Not Regulated
DOT	Not Regulated
IMO	Not Regulated
ICAO	NA
ERAP	NA

SECTION 15: REGULATORY INFORMATION

WHMIS Classification	Not Controlled
OSHA	NA
Other	NA
TSCA	Not Regulated
DSL / TOSCA	Not Regulated

SECTION 16: OTHER INFORMATION

Regulatory Information	
SARA & WHMIS	These products are not considered as a hazardous substance as defined by SARA title 111 regulations (40 CFR 372).
SARA Section 313 Listed Ingredients	These products do not contain any substance that is subject to the reporting requirements of 40 CFR 372. SARA Classification: Listed.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is provided solely for the customer's consideration, and verification. Hereby specifically claims. It shall not be held liable for any damage resulting from handling or from contact with the above products.