concreation canada inc

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M.S.D.S. SHEET

CCI-200 CONCREATION INTEGRACON **Update: 05/31/2015**

1 PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier: CCI-200 Concreation Integracon

Commercial Product Name: Integral Colouring for Concrete

Chemical Name: Mixtures of pigments (iron oxides and/or titanium dioxide and/or chromium III oxide Manufacturer:

Concreation Canada Inc.
582 Rivermede Road, Unit 8
Concord, ON L4K 2H5

1.2 Emergency Telephone Number: CHEMTREC (800) 424-9300

1.3 Identified Uses: pigment mixture for colouring concrete in ready mix application

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

Signal Word: **WARNING**

GHS Category Key
1 = Most Hazardous
5 = Least Hazardous

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Main Constituent: Various iron oxide pigments, titanium dioxide

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, FeO·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%
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.

Ingestion: 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.

4.1 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

4.2 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 ACCIDENTIAL 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		
Components of Mixture, Formula	ACGIH TLV 8hr	OSHA PEL 8hr	NIOSH REL TWA
Iron Oxide Pigment Red, Fe_2O_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_3O_4	5 mg/m^3	10 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_2O_3 as C	0.5 mg/m^3 8hr	0.5 mg/m^3 8hr	No Data Available

Personal Protective Equipment

Respirator Selection: Particulate/Mist Filter

8.2 Exposure controls:

Engineering measures: Use only with adequate ventilation.

8.2 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
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/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_2O_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_3O_4	>5,000 mg/kg	No Data Available	Slight or no skin irritation, rabbit
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_2O_3	>5,000 mg/kg	5.41 mg/L (as dust)	LD_{50}, Dermal, skin, no irritation, rabbit

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 OSHAas 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

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12 ECOLOGICAL INFORMATION

12.1 Toxicity:

	Aquatic Toxicity Fish			Aquatic Toxicity Invertebrates		
Components of Mixture	LC_{50} or $*LC_0$	Species	Duration	EC_{50} or $*EC_0$	Species	Duration
Iron Oxide Pigment Red	*50,000 mg/L	Danio rerio	96 hr	>100 mg/L	Daphnia magna	48 hr
Iron Oxide Pigment Yellow	*>10,0000 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
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

Ecotoxicity: This product is not expected to be hazardous to the environment. NDA = No Data Availabl

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.

SARA 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

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

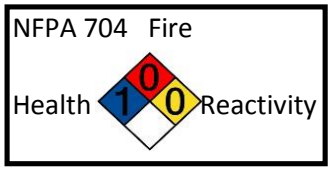
0=minimal hazard. 4 = extreme hazard

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	National Fire Protection Association
NIOSH	al Isational Institute for Occupational Safety and Health
NLE	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).



0=low hazard, 4=high hazard

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.

END OF SDS

LIMITED WARRANTY

Concreation Canada Inc. 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 CONCREATION CANADA 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. CONCREATION CANADA INC. WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, DELAYS OR LOST PROFITS. Communication of this warranty and its limitations to end users is not the responsibility of Concreation Canada Inc., but should be communicated by those in direct contract with the end 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.