



## Material Safety Data Sheet

Revision Date: 24-Oct-2011

Revision Number: 5

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** TOUGH SHIELD FLOOR & PATIO COATING  
**Product Code** 52-Series  
**Product Class** WATER THINNED PAINT  
**Color** All

**Manufacturer** Complementary Coatings Corp.  
 dba Insl-X  
 101 Paragon Drive  
 Montvale, NJ 07645  
 Phone: (800)-225-5554  
 www.insl-x.com

**Emergency Telephone Number(s)**  
 CHEMTREC (US): 800-424-9300  
 CHEMTREC (outside US): (703)-527-3887

### 2. COMPOSITION INFORMATION ON COMPONENTS

#### Hazardous Components

Chemical Name	CAS-No	Weight % (max)
Titanium dioxide	13463-67-7	20
Iron oxide	1309-37-1	15
Limestone	1317-65-3	15
Nepheline syenite	37244-96-5	10
Kaolin	1332-58-7	10
Silica, crystalline	14808-60-7	10
Carbon black	1333-86-4	5

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

Vapors may be irritating to eyes, nose, throat, and lungs. May cause skin irritation and/or dermatitis.

CAUTION: All floor coatings may become slippery when wet. Where non-skid characteristics are desired, a small amount of clean sand may be added. Stir often during application.

**Appearance** liquid

**Odor** little or no odor

**Potential Health Effects**

**Principal Routes of Exposure** Eye contact, skin contact and inhalation.

**Acute Effects****Eyes**

May cause slight irritation.

**Skin**

Substance may cause slight skin irritation.

**Inhalation**

May cause irritation of respiratory tract.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Chronic Effects**

Repeated contact may cause allergic reactions in very susceptible persons.

Contains: Crystalline Silica which has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.

See Section 11 for additional Toxicological information.

**Aggravated Medical Conditions** None known

**HMIS**            **Health:** 1\*            **Flammability:** 0            **Reactivity:** 0            **PPE:** -

**HMIS Legend**

0 - Minimal Hazard

1 - Slight Hazard

2 - Moderate Hazard

3 - Serious Hazard

4 - Severe Hazard

\* - Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.

*Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.*

*Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.*

## 4. FIRST AID MEASURES

**General Advice**

No hazards which require special first aid measures.

**Eye Contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation**

Move to fresh air. If symptoms persist, call a physician.

**Ingestion**

Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.

**Notes To Physician**

Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective Equipment And Precautions For Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific Hazards Arising From The Chemical</b>	Closed containers may rupture if exposed to fire or extreme heat.
<b>Sensitivity To Mechanical Impact</b>	No
<b>Sensitivity To Static Discharge</b>	No
<b>Flash Point Data</b>	
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
<b>Flammability Limits In Air</b>	
Lower Explosion Limit	Not applicable
Upper Explosion Limit	Not applicable

**NFPA**      **Health:** 1      **Flammability:** 0      **Instability:** 0      **Special:** -

### NFPA Legend

- 0 - Not Hazardous
- 1 - Slightly
- 2 - Moderate
- 3 - High
- 4 - Severe

*The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.*

*Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at [www.nfpa.org](http://www.nfpa.org).*

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods For Clean-Up</b>	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
<b>Other Information</b>	None known

## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.
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**Storage** Keep container tightly closed. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Limits

#### Hazardous Components

Chemical Name	ACGIH	OSHA
Titanium dioxide	10 mg/m <sup>3</sup> - TWA	15 mg/m <sup>3</sup> - TWA total
Iron oxide	5 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA
Limestone	N/E	15 mg/m <sup>3</sup> - TWA total 5 mg/m <sup>3</sup> - TWA
Nepheline syenite	N/E	5 mg/m <sup>3</sup> - TWA (nuisance dust)
Kaolin	2 mg/m <sup>3</sup> - TWA	15 mg/m <sup>3</sup> - TWA total 5 mg/m <sup>3</sup> - TWA
Silica, crystalline	0.025 mg/m <sup>3</sup> - TWA	respirable - (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable - (250)/(%SiO <sub>2</sub> + 5) mppcf TWA total dust - (30)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA
Carbon black	3.5 mg/m <sup>3</sup> - TWA	3.5 mg/m <sup>3</sup> - TWA

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits

OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

#### Personal Protective Equipment

##### Eye/Face Protection

Safety glasses with side-shields.

##### Skin Protection

Protective gloves and impervious clothing.

##### Respiratory Protection

In case of insufficient ventilation wear suitable respiratory equipment.

**Hygiene Measures** Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	liquid
<b>Odor</b>	little or no odor
<b>Density (lbs/gal)</b>	9.0 - 10.7
<b>Specific Gravity</b>	1.0 - 1.3
<b>pH</b>	Not available
<b>Viscosity (centistokes)</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Vapor Pressure</b>	Not available
<b>Vapor Density</b>	Not available
<b>Wt. % Solids</b>	35 - 55
<b>Vol. % Solids</b>	30 - 40
<b>Wt. % Volatiles</b>	45 - 65

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Vol. % Volatiles	60 - 70
VOC Regulatory Limit (g/L)	< 250
Boiling Point (°F)	212
Boiling Point (°C)	100
Freezing Point (°F)	32
Freezing Point (°C)	0
Flash Point (°F)	Not applicable
Flash Point (°C)	Not applicable
Flash Point Method	Not applicable
Upper Explosion Limit	Not applicable
Lower Explosion Limit	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions To Avoid</b>	Prevent from freezing
<b>Incompatible Materials</b>	No materials to be especially mentioned.
<b>Hazardous Decomposition Products</b>	None under normal use.
<b>Possibility Of Hazardous Reactions</b>	None under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### **Product**

No information available

#### **Component**

##### Titanium dioxide

LD50 Oral: > 10000 mg/kg (Rat)

LD50 Dermal: > 10000 mg/m<sup>3</sup> (Rabbit)

LC50 Inhalation (Dust): > 6.82 mg/L (Rat, 4 hr.)

##### Iron oxide

LD50 Oral: > 5000 mg/kg (Rat) vendor data

##### Limestone

LD50 Oral: 6,450 mg/kg (Rat) vendor data

Sensitization: No sensitizing effects known.

##### Nepheline syenite

Sensitization: No sensitizing effects known.

Kaolin

LD50 Oral: &gt; 5000 mg/kg (Rat)

Silica, crystalline

LD50 Oral: 500 mg/kg (Rat) vendor data

Carbon black

LD50 Oral: &gt; 15400 mg/kg (Rat)

LD50 Dermal: &gt; 3000 mg/kg (Rabbit)

**Chronic Toxicity****Carcinogenicity***The information below indicates whether each agency has listed any ingredient as a carcinogen:*

<b>Chemical Name</b>	<b>ACGIH</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA Carcinogen</b>
Titanium dioxide		2B - Possible Human Carcinogen		Listed
Silica, crystalline	A2 - Suspected Human Carcinogen	1 - Human Carcinogen	Known Human Carcinogen	Listed
Carbon black		2B - Possible Human Carcinogen		Listed

- Crystalline Silica has been determined to be carcinogenic to humans by IARC (1) when in respirable form. Risk of cancer depends on duration and level of inhalation exposure to spray mist or dust from sanding the dried paint.
- Although IARC has classified titanium dioxide as possibly carcinogenic to humans (2B), their summary concludes: "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as paint."

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety &amp; Health Administration

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects****Product****Acute Toxicity to Fish**

No information available

**Acute Toxicity to Aquatic Invertebrates**

No information available

## 12. ECOLOGICAL INFORMATION

### Acute Toxicity to Aquatic Plants

No information available

### Component

#### Acute Toxicity to Fish

No information available

Titanium dioxide

LC50: >1000 mg/L (Fathead Minnow - 96 hr.)

### Acute Toxicity to Aquatic Invertebrates

No information available

### Acute Toxicity to Aquatic Plants

No information available

## 13. DISPOSAL CONSIDERATIONS

### **Waste Disposal Method**

Dispose of in accordance with federal, state, and local regulations. Dry, empty containers may be recycled in a can recycling program. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**ICAO / IATA** Not regulated

**IMDG / IMO** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

**United States TSCA**

Yes - All components are listed or exempt.

**Canada DSL**

No - Not all of the components are listed.

### Federal Regulations

#### SARA 311/312 hazardous categorization

Acute Health Hazard	No
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No

Reactive Hazard

No

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

*This product may contain trace amounts of (other) SARA reportable chemicals. Contact the preparer for further information.*

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following HAPs:

*This product may contain trace amounts of (other) HAPs chemicals. Contact the preparer for further information.*

**State Regulations****California Proposition 65**

*This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.*

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Louisiana	Rhode Island
Titanium dioxide	X	X	X		X
Iron oxide	X	X	X		X
Limestone	X	X	X		X
Kaolin	X	X	X		X
Silica, crystalline	X	X	X		X
Carbon black	X	X	X		X

**Legend**

X - Listed

## 16. OTHER INFORMATION

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

**Prepared By** Product Stewardship Department  
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**Revision Date:** 24-Oct-2011  
**Revision Summary** Not available

Disclaimer

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**End of MSDS**