



# SAFETY DATA SHEET

Revision Date: 15-Aug-2019

Revision Number: 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** TOUGH SHIELD FLOOR AND PATIO - LOW VOC, TILE RED  
**Product Code** CTS-3505  
**Alternate Product Code** UG0505  
**Product Class** Water thinned paint  
**Color** Red  
**Recommended use** Paint  
**Restrictions on use** No information available

**Manufacturer**  
Benjamin Moore & Co.  
101 Paragon Drive  
Montvale, NJ 07645  
Phone: 1-866-708-9180  
insl-x.com

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

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label elements

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

**Appearance** liquid

**Odor** little or no odor

### Hazards not otherwise classified (HNOC)

Not applicable

### Other information

No information available

### Other hazards

**CAUTION:** All floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

### 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Nepheline syenite	37244-96-5	5 - 10
Kaolin	1332-58-7	5 - 10
Iron oxide	1309-37-1	5 - 10
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	1 - 5
2-Propanol-1-butoxy	5131-66-8	1 - 5
Titanium dioxide	13463-67-7	0.1 - 0.5
Sodium C14-C16 olefin sulfonate	68439-57-6	0.1 - 0.5

### 4. FIRST AID MEASURES

<b>General Advice</b>	No hazards which require special first aid measures.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Consult a physician if necessary.
<b>Most Important Symptoms/Effects</b>	None known.
<b>Notes To Physician</b>	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
Method	Not applicable

**Flammability Limits In Air**

**Lower flammability limit:** Not applicable  
**Upper flammability limit:** Not applicable

**NFPA**    **Health:** 1                      **Flammability:** 0                      **Instability:** 0                      **Special:** Not Applicable

**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**

**Personal Precautions**                      Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**Other Information**                              Prevent further leakage or spillage if safe to do so.

**Environmental precautions**                      See Section 12 for additional Ecological Information.

**Methods for Cleaning Up**                      Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**7. HANDLING AND STORAGE**

**Handling**    Avoid contact with skin, eyes and clothing. Avoid breathing vapors, spray mists or sanding dust. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage**    Keep container tightly closed. Keep out of the reach of children.

**Incompatible Materials**                              No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
Kaolin	2 mg/m <sup>3</sup> - TWA	15 mg/m <sup>3</sup> - TWA 5 mg/m <sup>3</sup> - TWA
Iron oxide	5 mg/m <sup>3</sup> - TWA	10 mg/m <sup>3</sup> - TWA 15 mg/m <sup>3</sup> - TWA Rouge 5 mg/m <sup>3</sup> - TWA Rouge
Ethanol, 2-(2-butoxyethoxy)-	10 ppm - TWA	N/E
Titanium dioxide	10 mg/m <sup>3</sup> - TWA	15 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>Odor Threshold</b>	No information available
<b>Density (lbs/gal)</b>	10.2 - 10.6
<b>Specific Gravity</b>	1.23 - 1.27
<b>pH</b>	No information available
<b>Viscosity (cps)</b>	No information available
<b>Solubility(ies)</b>	No information available
<b>Water solubility</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Wt. % Solids</b>	45 - 55
<b>Vol. % Solids</b>	35 - 45
<b>Wt. % Volatiles</b>	45 - 55
<b>Vol. % Volatiles</b>	55 - 65
<b>VOC Regulatory Limit (g/L)</b>	<100
<b>Boiling Point (°F)</b>	212
<b>Boiling Point (°C)</b>	100
<b>Freezing point (°F)</b>	32
<b>Freezing Point (°C)</b>	0
<b>Flash point (°F)</b>	Not applicable
<b>Flash Point (°C)</b>	Not applicable
<b>Method</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper flammability limit:</b>	Not applicable
<b>Lower flammability limit:</b>	Not applicable
<b>Autoignition Temperature (°F)</b>	No information available
<b>Autoignition Temperature (°C)</b>	No information available
<b>Decomposition Temperature (°F)</b>	No information available
<b>Decomposition Temperature (°C)</b>	No information available
<b>Partition coefficient</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	Not Applicable
<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**

**Product Information**

**Information on likely routes of exposure**

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

**Acute Toxicity**

**Product Information**                      No information available

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms**                                      No information available

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

<b>Eye contact</b>	May cause slight irritation.
<b>Skin contact</b>	Substance may cause slight skin irritation. Prolonged or repeated contact may dry skin and cause irritation.
<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Sensitization</b>	No information available
<b>Neurological Effects</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target organ effects</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Aspiration Hazard</b>	No information available

**Numerical measures of toxicity**

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

**ATEmix (oral)**                                      55525 mg/kg

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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Iron oxide 1309-37-1	> 10000 mg/kg ( Rat )	-	-
Ethanol, 2-(2-butoxyethoxy)- 112-34-5	= 5660 mg/kg ( Rat )	= 2700 mg/kg ( Rabbit )	-
2-Propanol-1-butoxy 5131-66-8	= 1900 mg/kg ( Rat ) = 5660 µL/kg ( Rat )	= 3100 mg/kg ( Rabbit )	-
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Sodium C14-C16 olefin sulfonate 68439-57-6	= 2310 mg/kg ( Rat )	= 6300 mg/kg ( Rabbit )	-

**Carcinogenicity**

The information below indicates whether each agency has listed any ingredient as a carcinogen:

Chemical name	IARC	NTP	OSHA
Titanium dioxide	2B - Possible Human Carcinogen		Listed

• 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**

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity Effects**

The environmental impact of this product has not been fully investigated.

**Product Information**

**Acute Toxicity to Fish**

No information available

**Acute Toxicity to Aquatic Invertebrates**

No information available

**Acute Toxicity to Aquatic Plants**

No information available

**Persistence / Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in Environmental Media**

No information available.

**Ozone**

No information available

**Component Information**

**Acute Toxicity to Fish**

Titanium dioxide

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

**Acute Toxicity to Aquatic Invertebrates**

Ethanol, 2-(2-butoxyethoxy)-

EC50: 100 mg/L (Daphnia - 48 hr.)

**Acute Toxicity to Aquatic Plants**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method**

Dispose of in accordance with federal, state, and local regulations. 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**

**TSCA: United States**

Yes - All components are listed or exempt.

**DSL: Canada**

Yes - All components are listed or exempt.

**Federal Regulations**

**SARA 311/312 hazardous categorization**

Acute health hazard	No
Chronic Health Hazard	No
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:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>CERCLA/SARA 313 (de minimis concentration)</u>
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	1 - 5	1.0

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

This product contains the following HAPs:

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>Hazardous Air Pollutant (HAP)</u>
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	1 - 5	Listed

**US State Regulations**

**California Proposition 65**

 **WARNING:** Cancer and Reproductive Harm– [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

**State Right-to-Know**

<u>Chemical name</u>	<u>Massachusetts</u>	<u>New Jersey</u>	<u>Pennsylvania</u>
Kaolin	X	X	X
Iron oxide	X	X	X
Ethanol, 2-(2-butoxyethoxy)-		X	X

**Legend**

X - Listed

**16. OTHER INFORMATION**

**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.

**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  
Benjamin Moore & Co.  
101 Paragon Drive  
Montvale, NJ 07645  
800-225-5554

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**Revision Summary** Not available

Disclaimer

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**End of Safety Data Sheet**