


SAFETY DATA SHEET

TITE-ROC

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name:	Tite-Roc
Product Form:	Mixture
1.2 Product Use:	Anchoring Bolts and Railings
1.3 Supplier/Manufacturer:	Umaco, Inc. 60 Rear Newhall Street Lowell, MA 01852 Phone: 978-453-8881
1.4 Emergency Number:	CHEMTREC (800) 424-9300

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the Chemical:	
Hazard Class:	
Acute toxicity	4 (oral)
Skin irritation	2
Serious Eye Damage	1
Skin sensitization	1
Carcinogenicity	1A
Specific target organ toxicity	Single exposure 3
Specific target organ toxicity	Repeated exposure 1
2.2 Label Elements:	
Hazard Pictogram:	
Single Word:	Danger
Hazard Statement:	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure
Prevention:	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust.

Response:	
If Swallowed:	Immediately call a poison center/doctor. Rinse mouth.
If in Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
If on Skin:	Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs get medical advice/attention. If exposed or concerned get medical advice/attention.
If Inhaled:	Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
Storage:	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal:	Dispose of contents and container in accordance with all local, regional, national, and international regulations.
2.3 Additional Information:	
Hazards not otherwise classified:	N/A 60.0% of the mixture consists of ingredient(s) of unknown acute toxicity. This product is a hazardous chemical as defined by NOM-018-STPS-2000.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures:				
Ingredient	UN#	H/F/R/*	CAS#	Wt.%
Portland Cement	N/A	1/0/0	65997-15-1	25-75
Ferric Oxide	UN1376	1/0/0	1309-37-1	1-30
Silica, Crystalline, Quartz	N/A	N/A	14808-60-7	3-7
Calcium Oxide	UN1910	3/0/1	1305-78-8	3-7
Gypsum	UN3077	N/A	13397-24-5	3-7
Calcium Carbonate	N/A	1/0/0	1317-65-3	3-7
Magnesium Oxide	UN1418	2/0/0	1309-48-4	3-7
Plaster of Paris	N/A	1/0/0	26499-65-0	25-75

The exact percentage (concentration) or chemicals has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

* Per NOM-018-STPS-2000

Section 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:	
Eye:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
Skin:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Ingestion:	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.
4.2 Most Important Symptoms & Effects both Acute & Delayed:	
Eye:	Causes serious eye damage. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Skin:	Causes skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin. May cause sensitization by skin contact.
Inhalation:	May cause respiratory tract irritation.
Ingestion:	Harmful if swallowed. May cause stomach distress, nausea or vomiting.
4.3 Indication of Any Immediate Medical Attention and Special Treatments Needed:	
Note to Physicians:	Symptoms may not appear immediately.
Specific Treatments:	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:	
Means of Extinguishing:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.2 Special Hazards Arising From the Chemical:	
Flammability:	Not flammable by OSHA criteria.
Thermal Decomposition:	Decomposition products may include and are not limited to oxides of carbon.
Products of Combustion:	May include, and are not limited to: oxides of carbon.
Explosion:	Not available
5.3 Special Protective Equipment and Precautions for Fire Fighters:	
Protection of Firefighters:	Wear full firefighting turn-out gear (full Bunker gear) and self-contained breathing apparatus (SCBA), Keep upwind of fire. Evacuate personnel to safe areas. Cool containers/tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:	Review FIRE FIGHTING MEASURES and HANDLING AND STORAGE sections before proceeding with clean- up. Use appropriate PERSONAL PROTECTION EQUIPMENT during cleanup.
Personal Precautions:	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use personal protective equipment. Ventilate the area
6.2 Methods and Materials for Containment/Cleanup:	
Methods for Containment:	Contain spill, then place in a suitable container. Avoid actions that cause dust to be airborne. Avoid inhalation of dust and contact with skin. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for Cleanup:	Pick up and transfer to properly labeled containers.
Environmental Precautions:	If large quantities enter a waterway, advise local authorities.

Other Information:	Dispose of waste material according to local, state, and federal law.
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Section 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:	
Handling:	<p>Put on appropriate personal protection equipment. Avoid contact with skin, eyes, and clothing. Do not swallow. Good housekeeping is important to prevent accumulation of dust. Keep airborne dust concentrations below permissible exposure limit ("PEL"). Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. If crystalline silica dust cannot be kept below permissible limits, wear a respirator approved for silica dust when using, handling, storing, or disposing of this product or bag. See Section 8 for further information on respirators.</p> <p>Keep in original container or an approved alternative made from a compatible material, kept tightly closed when not used. The use of compressed air for cleaning clothing, equipment, etc., is not recommended. Wash or vacuum clothing that has become dusty. Handle and open container with care. When using do not eat, drink, or smoke. Wash hands before eating, drinking, or smoking. The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community "right-to-know" laws and regulations should be strictly followed.</p>
7.2 Conditions for Safe Storage, Including Any Incompatibilities:	
Storage:	<p>Store in accordance with local regulations. Keep out of the reach of children. Store in dust-tight, dry, labeled containers. Keep containers closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Do not store in an area equipped with emergency water sprinklers. Use corrosion-resistant structural materials and lighting and ventilation systems in the storage area.</p>

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control Parameters:		
Exposure Guidelines:		
Ingredient	OSHA-PEL	ACGIH-TLV
Portland Cement	15 mg/m ³ (total); 5 mg/m ³ (resp)	1 mg/m ³ (no asbestos and <1% crystalline silica, respirable fraction)
Ferric Oxide	10 mg/m ³	5 mg/m ³ (iron oxide fume, dust as Fe)
Silica, Crystalline, Quartz	((10 mg/m ³)/(%SiO ₂ +2) TWA (resp)) ((30 mg/m ³)/(%SiO ₂ +2) TWA (total)) ((250)/(%SiO ₂ +5) mppcf TWA (resp))	.025 mg/m ³
Calcium Oxide	5 mg/m ³	2 mg/m ³
Gypsum	15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable fraction)	10 mg/m ³
Calcium Carbonate	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³
Magnesium Oxide	15 mg/m ³	10 mg/m ³
Plaster of Paris	N/A	N/A

8.2 Exposure Controls:	
Engineering Controls:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
8.3 Individual Protective Measures:	
Personal Protective Equipment:	
Eye/Face Protection:	Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield). Contact lenses should not be worn when working with Portland cement or fresh cement products.
Hand Protection:	Wear suitable gloves.
Skin and Body Protection:	Prevention is essential to avoiding potential skin injury. Avoid contact with unhardened product. If contact occurs, promptly wash affected area with soap and water. Where prolonged exposure to unhardened portland cement products might occur, wear impervious clothing and gloves to eliminate skin contact. Where required, wear boots that are impervious to water to eliminate foot and ankle exposure. Periodically wash areas contacted by dry or wet product. If irritation occurs, immediately wash affected area and seek treatment.

Respiratory Protection :	A NIOSH approved dusk mask or filtering face-piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
General Hygiene Considerations:	Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:	
Appearance:	Powder
Color:	Gray
Odor:	No distinct odor
Odor Threshold:	N/A
Physical State:	Powder
pH:	12-13
Viscosity:	N/A
Freezing Point:	N/A
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Lower Flammability Limit:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Relative Density:	2.6 to 3.5
Bulk Density:	N/A
Lower Explosion Limit:	N/A
Upper Explosion Limit:	N/A
Solubility in Water:	Slight (0.01 to 1%)
Coefficient of Water/Oil Distribution:	N/A
Auto-ignition Temperature:	N/A
Percent Volatile, wt. %:	N/A
VOC Content, wt. %:	0% N/A; 0 wt, N/A

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity:	Heat. Incompatible materials. Moisture.
10.2 Chemical Stability:	Stable under normal conditions. Keep in dry storage.
10.3 Possibility of Hazardous Reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to Avoid:	Unintentional contact with water.
10.5 Incompatible Materials:	Wet cement is alkaline. As such, it is incompatible with acids, ammonium salts, and aluminum metals.
10.6 Hazardous Decomposition Products:	Will not spontaneously occur. Adding water results in hydration and produces (caustic) calcium hydroxide.

Section 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects	
Likely routes of exposure:	Skin contact, skin absorption, eye contact, inhalation, and ingestion.
Eye:	Irritating to eyes. May cause burns in the presence of moisture. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Skin:	May cause skin irritation. May cause burns in the presence of moisture. Skin contact during hydration may slowly develop sufficient heat that may cause severe burns possibly resulting in permanent injury. Do not allow product to harden around any body part or allow continuous, prolonged contact with skin. Handling can cause dry skin.
Ingestion:	May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
Inhalation:	Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause mechanical irritation (abrasion).

Acute Toxicity:			
Ingredient	IDLH	LC50	LD50
Portland Cement	5000 mg/m ³	N/A	N/A
Ferric Oxide	2500 mg Fe/m ³	N/A	Oral > 10000 mg/kg, rat
Silica, Crystalline, Quartz	Ca (25 mg/m ³ (cristobalite, tridymite) 50 mg/m ³ (quartz, tripoli)) 25 mg/m ³	N/A	Oral 500 mg/kg, rat
Calcium Oxide	25 mg/m ³	N/A	Oral 500 mg/kg, rat

Gypsum	N/A	N/A	N/A
Calcium Carbonate	N/A	N/A	N/A
Magnesium Oxide	750 mg/m ³	N/A	Oral > 5000 mg/kg, rat
Plaster of Paris	N/A	N/A	N/A

Calculated Overall Chemical Acute Toxicity Values

LC50 (inhalation): N/A
 LD50 (oral): 1603.8 mg/kg, rat
 LD50 (dermal): N/A

Ingredients	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Portland Cement	G-A4
Ferric Oxide	G-A4, I-3
Silica, Crystalline, Quartz	G-A2, I-1, N-1, O, CP65
Calcium Oxide	Not listed
Gypsum	Not listed
Calcium Carbonate	Not listed
Magnesium Oxide	G-A4
Plaster of Paris	Not listed

11.2 Delayed, Immediate and Chronic Effects of Short and Long Term Exposure:

Skin Corrosion/Irritation:	Causes skin irritation. May cause burns in the presence of moisture.
Serious Eye Damage/Irritation:	Causes serious eye damage. May cause burns in the presence of moisture.
Respiratory Sensitization:	Based on available data, the classification criteria are not met.
Skin Sensitization:	May cause an allergic skin reaction.
STOT-Single Exposure:	May cause respiratory irritation.
Chronic Health Effects:	Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.
Carcinogenicity:	May cause cancer.
Germ Cell Mutagenicity:	This product is not classified as a mutagen.
Reproductive Toxicity:	

Developmental:	Based on available data, the classification criteria are not met.
Fertility:	Based on available data, the classification criteria are not met.
STOT-Repeated Exposure:	Causes damage to organs through prolonged or repeated exposure.
Aspiration Hazard:	Based on available data, the classification criteria are not met.
Toxicologically Synergistic Materials:	N/A
Other Information:	N/A

Section 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity:	
Acute/Chronic Toxicity:	No ecological consideration when used according to directions. Normal dilution of this product to drains, sewers, septic systems, and treatment plants is not considered environmentally harmful.
12.2 Persistence and Degradability:	N/A
12.3 Bioaccumulative Potential	
Bioaccumulation:	N/A
12.4 Mobility in Soil:	N/A
12.5 Other Adverse Effects:	N/A

Section 13: DISPOSAL CONSIDERATION

13.1 Waste Treatment Methods:	
Disposal Method:	This material must be disposed of in accordance with local, state, provincial, and federal regulations.
Other disposal recommendations:	N/A

Section 14: TRANSPORTATION INFORMATION

14.1 UN Number:	DOT: TDG: NOM-004-SCT2-1994:	Not Regulated Not Regulated Not Regulated
14.2 UN Proper Shipping Name:	DOT: TDG: NOM-004-SCT2-1994:	Not applicable Not applicable Not applicable

14.3 Transport Hazard Class (ES): DOT: TDG: NOM-004-SCT2-1994:	Not Applicable Not Applicable Not Applicable
14.4 Packing Group: DOT: TDG: NOM-004-SCT2-1994:	Not Applicable Not Applicable Not Applicable
14.5 Environmental Hazards:	Not Applicable
14.6: Transport in Bulk According to Annex II or Marpol 73/78 and the IBC Code:	Not Applicable
14.7 Special Precautions for User:	Do not handle until all safety precautions have been read and understood

Section 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislations Specific for the Chemical:

MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

SARA Title III:				
Ingredient	Section 302	Section 304	CERCLA	Section 313
Portland Cement	N/A	N/A	N/A	N/A
Ferric Oxide	N/A	N/A	N/A	N/A
Silica, Crystalline, Quartz	N/A	N/A	N/A	N/A
Calcium Oxide	N/A	N/A	N/A	N/A
Gypsum	N/A	N/A	N/A	N/A
Calcium Carbonate	N/A	N/A	N/A	N/A
Magnesium Oxide	N/A	N/A	N/A	N/A
Plaster of Paris	N/A	N/A	N/A	N/A

STATE REGULATIONS:

California Prop. 65: This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories:	
Ingredient	USA/TSCA
Portland Cement	YES
Ferric Oxide	YES
Silica, Crystalline, Quartz	YES
Calcium Oxide	YES
Gypsum	NO
Calcium Carbonate	YES

Magnesium Oxide	YES
Plaster of Paris	NO

NFPA: National Fire Protection Association:

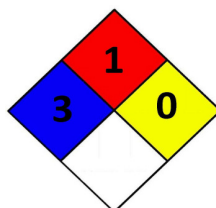
Health: 3
 Fire: 1
 Reactivity: 0

HMIS: Hazardous Materials Identification System:

Health: 3*
 Fire: 1
 Reactivity: 0

Hazard Rating:				
0 = minimal	1 = slight	2 = moderate	3 = severe	4 = extreme

Mexico Classification:



Blue = Health	Red = Flammability	Yellow = Reactivity	White = Special
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Source Agency Carcinogen Classifications	
CP65	California Proposition
OSHA (O)	Occupational Safety and Health Administration.
ACGIH (G)	American Conference of Governmental Industrial Hygienists. A1 - Confirmed human carcinogen. A2 - Suspected human carcinogen. A3 - Animal carcinogen. A4 - Not classifiable as a human carcinogen. A5 - Not suspected as a human carcinogen.

IARC (I)	<p>International Agency for Research on Cancer.</p> <p>1 - The agent (mixture) is carcinogenic to humans.</p> <p>2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.</p> <p>2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.</p> <p>3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.</p> <p>4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.</p>
NTP (N)	<p>National Toxicology Program.</p> <p>1 - Known to be carcinogens.</p> <p>2 - Reasonably anticipated to be carcinogens.</p>

Section 16: OTHER INFORMATION

Date of Preparation:	July 1, 2015
Version:	1.0
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Disclaimer:	<p>We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.</p>
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