

URETHANE CEMENT

PUR-CLUM C

SECTION 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF HAZARDOUS PRODUCT: Carcinogenicity (inhalation) (Category 1A) Skin Corrosion/irritation (Category 1) Serious eye damage/irritation (Category 1) Specific target organ toxicity-single exposure (Category 3- respiratory tract irritation) Specific target organ toxicity- repeated exposure (Category 2)

HAZARD AND PRECAUTIONARY STATEMENT

H350i May cause cancer by inhalation
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H335 May cause respiratory irritation
H373 May cause damage to organs through
prolonged or repeated exposure

P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P271 Use only outdoors or in a well-ventilated area. P260 Do not breathe dusts/fume/gas/mist/vapours/spray. P314 Get medical advice/attention if you feel unwell. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P264 Wash with plenty of water and soap thoroughly after handling. P308 + P313 IF exposed or concerned: Get medical advice/attention. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P310 Immediately call a POISON CENTER/doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

OTHER HAZARDS KNOWN: None known GHS SPECIAL LABELING: None known

GHS LABEL ELEMENTS

Hazard Pictograms/symbols



SIGNAL WORD: DANGER

DATE & VERSION - JANUARAY 11TH 2018 VERSION 1 SAFETY DATA SHEET (SDS)

SECTION 1.

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFIER	PUR-CLUM C
OTHER MEANS OF IDENTIFICATION	NONE
RECOMMENDED USE:	CEMENT, FOR CEMENTITIOUS URETHANE SELF-LEVELING COATING
MANUFACTURED BY:	PUREPOXY 500 DELAWARE AVE, STE 1 #1960 WILMINGTON, DE 19899
E-MAIL ADDRESS :	WWW.PUREPOXY.COM
PREPARED BY:	THE HEALTH, SAFETY AND ENVIRONMENTAL DEPARTMENT OF PUREPOXY
TELEPHONE NUMBER OF PREPARER:	438-492-4450
EMERGENCY TELEPHONE NUMBER:	24-HOUR EMERGENCY TELEPHONE NUMBER CANADA (CANUTEC) : (613) 996-6666

SECTION 3.

COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Natural sand	None	60 - 100 %
Quartz (Crystalline Silica)	14808-60-7	1 - 5 %
Cement, Portland, chemicals	65997-15-1	10 - 30 %
Calcium hydroxide	1305-62-0	1 - 10 %

SECTION 4.

FIRST AID MEASURES

INHALATION IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Assist in breathing if necessary. Immediate medical attention required.

INGESTION IF SWALLOWED: Get medical attention immediately. Call a poison center or physician. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Chemical burns must be treated promptly by a physician.



SKIN CONTACT	IF ON SKIN: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	IF IN EVES: Cot modical attention immediately. Call a poison conter or physician. Immediately fluch eves with

EYE CONTACT IF IN EYES: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician.

MOST IMPORTANT SYMPTOMS AND EFFECTS (ACUTE AND DELAYED)

Eye Contact: Causes serious eye damage.

Inhalation: May cause respiratory irritation.

Skin Contact: Causes severe skin burns. Causes skin irritation.

Ingestion: May cause burns to mouth, throat and stomach.

OVER-EXPOSURE SIGNS/SYMPTOMS

Eye Contact: Adverse symptoms may include the following: pain, watering, and redness

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, burning sensation, coughing

Skin Contact: Adverse symptoms may include the following: pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may occur

Ingestion: Adverse symptoms may include the following: burning sensation, abdominal cramps and pain, vomiting

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments: No specific treatment

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

GENERAL INFORMATION

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure the medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5.

FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire. Unsuitable extinguishing media: Do not use water jet or water-based fire extinguishers.

SPECIFIC HAZARDS ARISING FROM THE HAZARDOUS PRODUCT: No specific fire or explosion hazard. Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTING: Fire-fighters should wear appropriate protective equipment (gloves, protective clothing) and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

FURTHER INFORMATION: Keep containers cool by spraying with water if exposed to fire. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6.

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Spilled material, where dust can be generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Do not breathe dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

For small amounts: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of waste material by using a licensed waste disposal contractor.

For large amounts: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Large spills to waterways may be hazardous due to alkalinity of the product. Dispose of waste material by using a licensed waste disposal contractor.

ENVIRONMENTAL PRECAUTIONS

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.



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SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Avoid exposure- obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid inhalation of dust and contact with eyes and skin. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep container tightly closed. Keep material dry in storage. Avoid creating dust. Avoid breakage of bagged material or spills of bulk material. A key to using the product safely requires the user to recognize that Portland cement reacts chemically with water to produce calcium hydroxide which can cause severe chemical burns. Every attempt should be made to avoid skin and eye contact with cement.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS (BIOLOGICAL LIMIT VALUES OR EXPO-SURE LIMIT VALUES AND SOURCE OF THOSE VALUES)

ACGIH TLV (United States, 3/2012)
TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction
NIOSH REL (United States, 6/2009)
TWA: 0.05 mg/m ³ 10 hours. Form: respirable dust
OSHA PEL Z-3 (United States, 9/2005)
TWA: 10 mg/m ³ divided by %SIO ₂ + 2: Respirable
TWA: 30 mg/m ³ divided by %SIO ₂ + 2: Total
ACGIH TLV (United States, 3/2012)
TWA: 1 mg/m ³ 8 hours. Form: Respirable fraction
NIOSH REL (United States, 6/2009)
TWA: 5 mg/m ³ 10 hours. Form: Respirable fraction
TWA: 10 mg/m ³ 10 hours. Form: Total
OSHA PEL Z-3 (United States, 9/2005)
TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
TWA: 15 mg/m ³ 8 hours. Form: Total dust
OSHA PEL (United States, 2/2013)
TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
TWA: 15 mg/m ³ 8 hours. Form: Total dust
ACGIH TLV (United States, 4/2014)
TWA: 5 mg/m ³ 8 hours
NIOSH REL (United States, 10/2013)
TWA: 5 mg/m ³ 10 hours
MSHA PEL
TWA 8/40 hours: 5mg/m ³

ENGINEERING CONTROLS

Use only with adequate ventilation. If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Eyewash stations should be within direct access.

PERSONAL PROTECTIVE EQUIPMENT

Use impervious, waterproof, abrasion and alkali-resistant gloves. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Safety glasses with side shields should be worn as minimum protection. Appropriate footwear and any additional skin protection should be selected based on the task being performed and the risks involved. Footwear and other gear to protect the skin should be approved by a specialist before handling this product. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and assigned protection factor of the selected respirator. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eyewash fountains and safety showers are recommended in the work area.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE/ APPEARANCE/ COLOR: SOLID / FINE POWDER/ NEUTRAL			
ODOUR:	ODORLESS		
ODOUR THRESHOLD:	NOT AVAILABLE		
PH:	NOT APPLICABLE		
MELTING/FREEZING POINT:	NOT AVAILABLE		
INITIAL BOILING POINT/RANGE:	NOT AVAILABLE		
FLASH POINT:	NOT FLAMMABLE. NON-COMBUSTIBLE.		
EVAPORATION RATE:	NOT AVAILABLE		
FLAMMABILITY (SOLIDS AND GASES):	NOT APPLICABLE		
UPPER AND LOWER FLAMMABILITY/EX- PLOSIVE LIMITS	NOT APPLICABLE		

VAPOUR PRESSURE:	NOT APPLICABLE
VAPOUR DENSITY:	NOT APPLICABLE
RELATIVE DENSITY:	1.93 – 2.63 (G/ML)
SOLUBILITY IN WATER:	SLIGHTLY SOLUBLE IN WATER
PARTITION COEFFICIENT-N-OCTA- NOL/WATER:	NOT APPLICABLE
AUTO-IGNITION TEMPERATURE:	NOT AVAILABLE
THERMAL DECOMPOSITION TEMPERATURE:	NOT AVAILABLE
VISCOSITY:	NOT APPLICABLE
VOC:	0
OTHER:	NONE KNOWN



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SECTION 10. STABILITY AND REACTIVITY

<u>REACTIVITY</u>: This product is stable and non-reactive under normal conditions of use, storage and transport. Cement reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

CHEMICAL STABILITY: This product is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Under normal conditions of storage and use, hazardous reactions will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Reactive or incompatible with the following materials: **HYDRATED LIME** – oxidizing materials and acids. **SAND**- oxidizing materials such as fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride. Soluble in hydrofluoric acid and produces a corrosive gas- silicon tetrafluoride. Quartz is attacked by strong alkalis and hydrofluoric acid. **PORTLAND CEMENT**- oxidizing materials, acids, aluminum and ammonium salt. Portland cement is highly alkaline and will react with acids to produce a violent, heat-generating reaction. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosion. Silicates dissolve readily in hydrofluoric acid producing a corrosive as- silicon tetrafluoride.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE (INHALATION, INGESTION, SKIN AND EYE CONTACT):

May cause skin irritation. May cause serious burns in the presence of moisture. Causes serious eye damage. May cause burns in the presence of moisture. May cause respiratory tract irritation. May cause burns to mouth, throat and stomach.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

Eye Contact: Adverse symptoms may include the following: pain, watering, and redness

Inhalation: Adverse symptoms may include the following: respiratory tract irritation, burning sensation, coughing

Skin Contact: Adverse symptoms may include the following: pain or irritation, redness and blistering may occur, skin burns, ulceration and necrosis may occur

Ingestion: Adverse symptoms may include the following: burning sensation, abdominal cramps and pain, vomiting

DELAYED AND IMMEDIATE EFFECTS (CHRONIC EFFECTS FROM SHORT- TERM AND LONG-TERM EXPOSURE):

Skin Sensitization – No data available; Respiratory Sensitization – No data available ; Germ Cell Mutagenicity – No data available; Carcinogenicity – Quartz: may cause cancer if inhaled. Risk of cancer depends in duration and level of exposure; Reproductive Toxicity – No data available; Specific Target Organ Toxicity — Single Exposure – Causes irritation of the respiratory tract; Specific Target Organ Toxicity - Repeated Exposure – May cause damage to organs (respiratory tract, kidneys) through prolonged or repeated exposure (by inhalation); Aspiration Hazard – No aspiration hazard expected; Health Hazards Not Otherwise Classified – No data available.

NUMERICAL MEASURES OF TOXICITY (ATE; LD50 & LC50):

 CAS 14808-60-7
 LCL, Inhalation; Dose : 300μg/m3/10Y

 CAS 65997-15-1
 No data available

 CAS 1305-62-0
 LD50, Oral- Rat - 7340 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY (AQUATIC AND TERRESTRIAL INFORMATION):

This product is not classified as environmentally hazardous.

Product	Species	Result
CAS 14808-60-7	No data available	
CAS 65997-15-1	No data available	
CAS 1305-62-0	LC ₅₀ Clarias gariepinus - Fingerling	33884.4 µg/L Fresh Water 96 hours

PERSISTENCE AND DEGRADABILITY: No data available. BIOACCUMULATIVE POTENTIAL: No data available. MOBILITY IN SOIL: Not available. OTHER ADVERSE EFFECTS: No data available.



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SECTION 13. DISPOSAL CONSIDERATIONS

INFORMATION ON SAFE HANDLING FOR DISPOSAL/METHODS OF DISPOSAL/CONTAMINATED PACKAGING: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Untreated waste should not be released to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its containers must be disposed of in a safe manner. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff, and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

UN NUMBER; PROPER SHIPPING NAME; CLASS(ES); PACKING GROUP (PG) OF THE TDG REGULATIONS: Not classified as a dangerous good under transport regulations.

UN NUMBER; PROPER SHIPPING NAME; CLASS(ES); PACKING GROUP (PG) OF THE IMDG (MARITIME): Not classified as a dangerous good under transport regulations.

UN NUMBER; PROPER SHIPPING NAME; CLASS(ES); PACKING GROUP (PG) OF THE IATA (AIR): Not classified as a dangerous good under transport regulations.

SPECIAL PRECAUTIONS(TRANSPORT/CONVEYANCE): None

ENVIRONMENTAL HAZARDS (IMDG OR OTHER): None known

BULK TRANSPORT (USUALLY MORE THAN 450L IN CAPACITY): Possible.

SECTION 15. REGULATORY INFORMATION

SAFETY/HEALTH CANADIAN REGULATIONS SPECIFICS: Refer to section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR). ENVIRONMENTAL CANADIAN REGULATIONS SPECIFICS: Refer to section 3 for ingredient(s) of the DSL. SAFETY/HEALTH/ENVIRONMENTAL OUTSIDE REGULATIONS SPECIFICS: None

DATE OF LATEST REVISION OF THE SAFETY DATA SHEET: JAUNARY 11TH 2018

NOTICE TO READER:

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