Date Prepared: 10/24/2013 Date Printed: 7/21/2015

CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MATERIAL IDENTITY: Urethane Foam Resin INFORMATION TELEPHONE: 920-645-6205 RR 201 B

800-626-2464

EMAIL ADDRESS FOR MSDS: info@hmicompany.com **COMPANY:**

Hydraulic Mudpumps, Inc 1025 East Albert Drive

EMERGENCY TELEPHONE:

Manitowoc, WI 54220 CHEMTREC: 800-424-9300

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW OSHA HAZARDOUS

Target Organ Effect: Irritant

Target Organs: Respiratory, Eyes, Skin, Liver, Bladder

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Health		Environmental		Physical	
Respiratory Tract	Category 5	Acute Aquatic	Category 3	Not Classified	
Irritant	Category 3	Toxicity			
Skin Irritant	Category 2B				
Eye Irritant					
Target Organ	Category 5				
Toxicity (kidney,					
liver)					

Pictogram:





Signal Word Warning

Hazard Statements		Precautionary Statements		
H302	Harmful if swallowed	P264 Wash hands thoroughly after handling		
H316	Causes mild skin irritation	P270 Do not eat, drink, or smoke when using this		
H320	Causes eye irritation	product.		
H333	May be harmful if Inhaled	P280 Wear protective gloves/protective clothing/eye		
H335	May cause respiratory irritation	protection/face protection		
H402	Harmful to aquatic life	P301+P312 IF SWALLOWED: Call a POISON		
		CENTER or doctor or physician if you feel		
		unwell		

COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization:

Ingredient(s)	CAS Number	% (by weight)	
Polyether Polyol Resin	Mixture	70 – 90 %	
Tris(B-chloropropyl)phosphate (TCPP)	13674-84-5	5 - 15 %	

*** Polyether polyol resins may include; (9051-51-8; 9049-71-3; 52625-13-5; 25791-96-2, 70749-97-2) and other polyol resins

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4. FIRST AID MEASURES

Eyes Contact: Check for and remove any contact lenses. Immediately flush eyes gently with large amounts of water for at least 15 minutes. Retract eyelids often. Get prompt medical attention.

Skin Contact: Remove contaminated clothing. Wash the exposed area with mild soap and water. Flush w/lukewarm water for at least 15 minutes. Launder contaminated clothing before re-use. Seek medical attention if ill effect or irritation develops.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Keep person warm, quiet and get medical attention. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis which can be fatal. Target organs include liver, kidney, bladder and sternal bone marrow. Can cause gastrointestinal irritation. Symptoms of TCPP exposure may include salivation, sweating, headache, nausea, muscle twitching, abdominal cramping, diarrhea and chest discomfort.

Inhalation: Wear appropriate respiration protection if vapor or mist is expected. Inhalation may cause respiratory tract irritation. If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention immediately.

Advice to physicians: Treat symptomatically and supportively. TCPP may cause cholinesterase inhibition. If cholinesterase inhibition is suspected, atropine by injection is antidotal. 2-PAM (protopan chloride) is also antidotal when administered early and in conjunction with atropine. Following exposure medical follow-up should be maintained for at least 48 hours.

5. FIRE FIGHTING MEASURES

Conditions of Flammability

Not flammable or combustible

Suitable extinguishing media

SMALL FIRE: Use dry chemical powder.

LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

Hazardous Decomposition Products

Acrid smoke-fumes, hydrocarbons, carbon monoxide, carbon dioxide, phosphorous oxides, hydrogen chloride gas and perhaps other toxic vapors may be released during a fire involving this product.

Fire Fighting Instructions

Wear self contained breathing apparatus (pressure-demand MSHA/NIOSH) approved or equivalent and protective clothing. See Section 10 – decomposition products possible. Fight fire from safe distance/protected location. For a large fire use water spray, fog or foam. DO NOT use water jet.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental Precautions

Prevent runoff from entering drains, sewers, or streams. Spilled or released material may polymerize and release heat/gases. Eliminate all ignition sources and ventilate area. Wear protective equipment during clean up.

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Methods and Materials for Containment and Cleaning Up

Stop the leak if it can be done without risk. Move containers from the spill area. Prevent entry into sewers, water ways or soils by diking and recovering large spills. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth. Soak up small spills with inert solids (such as vermiculite, clay) and sweep/shovel into vented container. Dispose of all residuals according to local regulations via a licensed waste disposal contractor. Containers and contaminated absorbent materials may pose the same hazards as the spilled product. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean up. See section 1 for emergency contact information and section 13 for waste disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing vapors or spray mists. Avoid contact with eyes, skin, and clothing. Keep container tightly closed and store in a cool, well ventilated area away from: heat, sparks, open flame, strong oxidizers, radiation and other initiators. DO NOT store above 40° C (104° F). If frozen, warm and remix material gently (<90F). Prevent moisture contact. Prevent contamination by foreign materials.

Conditions for Safe Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for 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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	PEL	STEL	TLV	Other
Polyether Polyol Resin	NE	NE	NE	NE
Tris(B-chloropropyl)phosphate (TCPP)	NE	NE	NE	NE

Engineering Controls

Use local exhaust ventilation to maintain airborne concentrations below exposure limits. Respiratory protection may be required in addition to general room ventilation.

Respiratory Protections

Use a properly fitted, air-purifying or air supplied 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 or the product and the safe working limits of the selected respirator.

Eye Protection

Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles or vapor. Contact lenses should not be worn.

Skin and Body Protection

When skin contact is possible, protective clothing including apron, sleeves, boots head and face protection should be worn. Wear chemical resistant gloves such as neoprene, rubber, latex, etc.

Other hygienic practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work using plenty of soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form Viscous liquid Color Dark Amber Not available рH Melting/Freezing Temperature Not available **Boiling Point** > 350 C/660 FFlash Point > 245 C/ 473 F **Ignition Temperature** Not available **Autoignition Temperature** Not available

Lower explosive limit; na Upper explosive limit: na

Vapor Pressure Not available

Vapor Density (air=1) > 1

Specific Gravity (water=1 @39.2F) 1.06 @ 25C/77F

Percent Volatiles < 1%

Evaporation Rate (Bac=1) Not available

Odor Mild

Odor threshold Not available

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

No data available. See materials to avoid below.

Conditions to Avoid

High temperatures, localized heat sources (i.e., drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers. Keep container tightly sealed.

Materials to Avoid

Reactive or incompatible with: strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

Hazardous Decomposition Products

Acrid smoke-fumes, hydrocarbons, carbon monoxide, carbon dioxide, phosphorous oxides, hydrogen chloride gas and perhaps other toxic vapors may be released during a fire involving this product.

11. TOXICOLOGY INFORMATION

Toxicity

Acute Toxicity

LD50: (Oral rat) 5,000 mg/kg Polyether Polyol
LD50: (Oral rat) 2,800 mg/kg Tris(2-chlorisopropyl)phosphate

LD50: (Dermal Rabbit) > 1,000 mg/kg Polyether Polyol

 $LD50: (Dermal \ Rabbit) > 5,000 \ mg/kg \\ LC50: (Inhalation \ Rat) > 4.6 \ mg/l$ $Tris(2-chlorisopropyl)phosphate \\ Tris(2-chlorisopropyl)phosphate$

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Skin Corrosion/Irritation

Skin Mild Irritant

Serious Eye Damage/Eye Irritation

Eye Mild Irritant

Respiratory

Respiratory Mild Irritant

Respiratory or Skin Sensitization

None Known

Mutagenicity

None Known

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

12. ECOLOGICAL INFORMATION

Aquatic Ecotoxicity

No data available for Polyether Polyol

Based on Tris(2-chlorisopropyl)phosphate.

Acute 96 hr LC50 56.2 mg/l Fish

Acute 48 hr EC50 131 mg/l Daphnia magna Acute 72 hr EC50 82 mg/l Freshwater algae

Chronic Toxicity Based on Tris(2-chlorisopropyl)phosphate

No Observed Effect Concentration (NOEC) in Daphnia magna is 32 mg/l

Biodegradability

Not readily biodegradable Not bioaccumulative

Mobility in soil

No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residuals. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. When a decision is made to discard this material as supplied, it does not meet RCRA's characteristics definition of ignitability, corrosiveness, or reactivity and is not listed in 40CFR261.33. The toxicity characteristic (TC), has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

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14. TRANSPORTATION INFORMATION

DOT (US)

Not Regulated

IMDG

Not Regulated

TDG

Not Regulated

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS

All components are listed or exempt.

OSHA HAZARDS

Skin, Respiratory, and Eye irritant.

HMIS Classification NFPA Rating

Health Hazard; 1 1 Flammability 1 1 Physical Hazards 0 0

SARA TITLE III: Section 311/312 Hazard Class

Acute Health Hazard, Chronic Health Hazard.

SARA TITLE III: Section 313 (40CFR370)

This product does not contain a chemical which is listed in Section 313 at or above the de minimus concentrations.

CERCLA Information (40CFR302.4)

This material contains no hazardous or extremely hazardous substances at or above the de minimus concentrations as defined by CERCLA or SARA Title III, and release is therefore not reportable.

California Proposition 65 Information:

This product contains, no listed substances known to the state of California to cause cancer and/or reproductive toxicity.

16. OTHER INFORMATION

Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. This SDS has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

*Note – qualifiers and codes that may be used in this MSDS

EQ=Equal; AP= Approximately; LT= Less Than; GT = Greater Than; TR =Trace; UK = Unknown; N/AP = Not Applicable; N/P = Not Applicable Information Found; N/DA = Not Data Available; NE = Not Established