



SDS: TUFF CAST- POLY

Rev. Date: FEB 2016

Section 1. IDENTIFICATION

Product Name: TUFF CAST POLYOL
Product Identifier/Chemical Name: Polyurethane Polyol
Material Use: Component B of a Polyurethane System
Supplier/Manufacturer: Goldenwest Manufacturing Incorporated
2036 Nevada City Hwy, Box 573, GV, CA 95945
530 272-1133 Fax 530 272-1070

Emergency Phone: Chemtrec: 800-424-9300

Section 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Specific target organ toxicity - Single exposure, 3 Health, Acute toxicity, 5 Dermal Health, Acute toxicity, 5 Inhalation

GHS Label elements, including precautionary statements

GHS Signal Word: **WARNING**

GHS Hazard Pictograms:



GHS Hazard Statements:

H336 - May cause drowsiness or dizziness
H313 - May be harmful in contact with skin
H333 - May be harmful if inhaled

GHS Precautionary Statements:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P501 - Dispose of contents/container to a licensed waste disposal services provider.

Hazards not otherwise classified (HNOC) or not covered by GHS

Route of Entry: Eyes; Ingestion; Inhalation; Skin;
Target Organs: Eyes; Skin; Respiratory system;
Inhalation: Heating, spraying, foaming or otherwise mechanically dispersing operations may generate vapor or aerosol concentrations sufficient to cause irritation or other adverse effects. Minimal respiratory tract irritation may occur with exposure to a large amount of material.
Skin Contact: Prolonged or repeated exposure can cause skin irritation or dermatitis in some individuals.



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Eye Contact: May cause watering of the eye and irritation of the conjunctiva.

NFPA: Health = 1, Fire = 0, Reactivity = 0, Specific Hazard = None

HMIS III: Health = 1, Fire = 0, Physical Hazard = 0



Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	%	Chemical Name
35176-06-8	42%	2,2'-iminobis-ethano polymer with methyloxirane
6846-50-0	58%	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate

Section 4. FIRST AID MEASURES

- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility immediately.
- Skin Contact:** Remove all contaminated clothing and shoes. Wash skin with large quantities of water and soap. Wash clothing before wearing again and clean shoes. If redness, itching or a burning sensation develops or persists after the area is washed, consult a physician.
- Eye Contact:** Flush with large amounts of water for 15 minutes. Use fingers to assure that the eyelids are separated and that the eye is being irrigated. Get immediate medical attention.
- Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. This material is an aspiration hazard. Never give anything by mouth to an unconscious person. Seek medical attention.

Section 5. FIRE-FIGHTING MEASURES

- Flash Point:** 136°C
- Flammable Limits:** Non explosive
- Hazardous Thermal Decomposition Products:** Carbon dioxide

Extinguishable Media

- Suitable:** Use alcohol foam, carbon dioxide, dry chemical or water spray when fighting fires. Water or foam may cause frothing if liquid solvent or oil is burning but still may be a useful extinguishing agent if carefully applied to the fire.
- Non Suitable:** None known



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Special protective Equipment for Fire-Fighters:

In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus. Use water to cool containers.

Section 6. ACCIDENTAL RELEASE MEASURES

Spill: Remove all sources of flames, heating elements, gas engines, etc. Emergency clean-up personnel should wear chemical goggles, rubber or plastic gloves and clothing as required to protect against contact. Prevent spreading and contamination of surface waters and drinking supplies. Notify local health officials and other appropriate agencies if such contamination should occur.

Clean up: With adequate ventilation and appropriate personal protective equipment, cover the area with an inert absorbent material such as clay or vermiculite and transfer to steel waste containers. Ventilate area to remove the remaining vapors.

Section 7. HANDLING AND STORAGE

Handling Precautions: Do not smoke or use naked lights, open flames, space heaters or other ignition sources near pouring, frothing or spraying operations. If contamination with isocyanates is suspected, do not reseal containers. Special Emphasis for spray applications of mixed products containing isocyanates: Inspect the application area for potential to expose other persons or for overspray to drift onto buildings, vehicles or other property. When spraying building exteriors, persons entering or exiting the building as well as those inside could be exposed to polyisocyanates due to wind conditions, open windows or air intakes. Do not begin application work until these potential problems have been corrected.

Storage Requirements: When stored between 60°-85° F in sealed containers, typical shelf life is 6 months or more from the date of manufacture. Open containers must be handled properly to prevent moisture pickup.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Uses requiring heating and/or spraying may require more aggressive engineering controls or PPE.

Personal Protective Equipment: Personal protective equipment
Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use.



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Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Splash contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 30 min Material tested: Butoject (KCL 897 / Aldrich Z677647, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1) [1-1%]: no data available

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [50-60%]: no data available

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pigmented liquid.	Odor:	Slight
Physical State:	Liquid	Solubility:	No data available
Odor Threshold:	No data available	Freezing/Melting Pt.:	No data available
Specific Gravity/Density:	.9811	Flash Point:	276° F
Viscosity:	No data available	Vapor Density:	>1
Boiling Point:	> 500° C	Auto-Ignition Temp.:	No data available
Flammability:	None Flammable	UFL/LFL:	No data available
Partition Coefficient:	No data available	Vapor Pressure:	No data available
pH:	No data available	Evap. Rate:	<1
Decomp. Temp.:	No data available		

Section 10. STABILITY AND REACTIVITY

Reactivity:	No specific data
Chemical Stability:	Product is stable under normal circumstances
Conditions to Avoid:	No specific data
Materials to Avoid:	Oxidizing Materials
Hazardous Decomposition:	Oxides of nitrogen, carbon dioxide, carbon monoxide.
Hazardous Polymerization:	Will not occur



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Section 11. TOXICOLOGICAL INFORMATION

General Information: No toxicological information is available on this specific preparation; this health hazard assessment is based on information that is available on the properties of its components.

Potential acute health effects

Inhalation: Because of its low volatility, exposure to vapors is unlikely and no significant adverse effects to health will occur from inhalation.

Ingestion: Ingestion may cause irritation to the gastrointestinal tract and gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea. Not expected to be toxic by ingestion.

Skin: No significant adverse effects to health would be expected to occur from dermal contact.

Eyes: Contact would be expected to cause minor irritation, consisting of transient redness and swelling. No corneal involvement or visual impairment is expected.

Prolonged (Chronic) health effects: No known or reported effects from chronic exposure.

Section 12. ECOLOGICAL INFORMATION

General Information: No toxicological information is available on this specific preparation.

Section 13. DISPOSAL CONSIDERATION

Disposal: Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

Do not allow material to enter sewers, a body of water, or contact the ground. Refer to RCRA 40 CFR 261, and/or any other appropriate federal, state or local requirements for proper classification information.

Section 14. TRANSPORT INFORMATION

Proper shipping name

DOT: Not regulated

TDG: Not regulated

IMDG: Not regulated

IATA : Not regulated



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Section 15. REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, synthetic zeolites) (1318-02-1) [.1-1%] IARC

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [0-60%] TSCA

Regulatory CODE Descriptions

IARC = IARC Carcinogen Risks
TSCA = Toxic Substances Control Act

Section 16. OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).