

TUFFLEX POLYMERS

SAFETY DATA SHEET

1. PRODUCTS AND COMPANY IDENTIFICATION

Product Name: Elasta-Tuff 5000-SC Base Membrane

Product Use: Polyurethane Construction Coating

Manufacturer/Supplier

TUFFLEX POLYMERS

10880 Poplar Avenue

Fontana, CA 92337

Web Address: www.tufflexpolymers.com

Fax Number: (909) 823-6309

Medical Emergency:

CHEMTREC (USA): (800) 424-9300

CHEMTREC (International): (703) 527-3887

SDS Assistance: (909) 349-2016

Technical Assistance: (909) 349-2016

Customer Service: (888) TUFFLEX

2. COMPONENT INFORMATION

Classification (GHS-US)

Flam. Liq. 2 H225
Flam. Liq. 3 H226
STOT SE 3 H336
Skin Irrit. 2 H315
STOT SE 3 H335
Muta. 1B H340
Carc. 1A H350
Tox. To Rep. 2 H361
STOT RE 1 H372
Asp. Tox. 1 H304
Aquatic Acute 3 H400
Aquatic Chronic 1 H410
Aquatic Chronic 2 H411

Label Elements
GHS-US Labeling



Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H225 - Highly flammable liquid and vapour
H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H350 - May cause cancer
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P281 - Use personal protective equipment as required.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
P308+313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label).
P331 - Do NOT induce vomiting.
P332+313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P370+P378 - In case of fire: Use appropriate media for extinction
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403 + P235 - Store in a well-ventilated place. Keep cool.
P403+233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up
P501 - Dispose of contents/container according to local, regional, national, and international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS No.	Wt. % Range	Classification (GHS-US)
Residual Toluene Diisocyanate	26471-62-5	< 0.5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aromatic Hydrocarbon Solvent	64742-95-6	18 - 22	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Muta. 1B, H340 Carc. 1A, H350 Tox. To Rep. 2, H361 Aquatic Chronic 2, H411
Aliphatic Hydrocarbon Solvent		8 – 10	
Aromatic Urethane Prepolymer	N/E	50 - 55	
Crystalline Silica (Quartz)	14808-60-7	< 1	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Titanium Dioxide	13463-67-7	7 - 10	Skin Irrit. 2, H315

* Information concerning non-hazardous ingredients is considered a trade secret.

4. FIRST AID INFORMATION

Emergency and Hazards Overview: Combustible, viscous, pigmented liquid with a solvent odor. Causes skin irritation. Causes eye irritation. Harmful if swallowed or inhaled. Vapors are heavier than air and may travel to distant sources of ignition and flash back.

Overexposure to vapors may cause dizziness, headache and central nervous depression. The product contains small amounts of aromatic isocyanate, which can cause reactivation of prior asthma-type allergic reactions and irritation of nose, throat and lungs.

Ratings

Health 2 Flammability 2 Reactivity 1

Primary Route of Exposure: Skin x Inhalation x Eye x Ingestion x

Health Effect Information

Eye Contact: May cause eye irritation if wiped or rubbed into eyes.

Skin Contact: May cause skin irritation if wiped or left on the skin

Inhalation: May cause irritation of respiratory tract which may result in sinusitis, bronchitis, or asthma. Breathing vapors may cause central nervous system depression.

Ingestion: Moderately toxic. Ingestion may cause symptoms similar to those of inhalation.

Medical Conditions Aggravated by Exposure: Prolonged exposure to solvents and isocyanates may aggravate allergic reactions to nose, throat and lungs.

Eye Contact: Immediately flush with copious amounts of lukewarm water for at least 15 minutes. Have eyes examined and treated by medical personnel.

Skin Contact: Dry skin with paper towel or similar. Wash affected skin thoroughly with soap and water. Immediately remove contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if any discomfort continues.

Inhalation: Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

Ingestion: If swallowed, give 1 to 2 glasses of milk to drink and contact a physician immediately. Do not induce vomiting. Decision to induce vomiting should only be made by a physician. Never give anything by mouth to an unconscious person.

Notes to Physician: This product contains aromatic and aliphatic hydrocarbon solvents and aromatic isocyanate.

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties

Flash Point: 110°F Test Method:TCC

Flame extension: NA Test Method: NA

Flammable Limits in Air

Upper Percent: 7

Lower Percent: 1

Autoignition Temperature: NA Test Method: NA

NEPA Classification: H 2 F 2 R 1

Extinguishing Media: CO₂, foam or dry chemicals.

Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: Use alcohol resistant foam, carbon dioxide, dry chemical to fight fires. Water spray may be used to cool containers. Water or foam may cause frothing if liquid is burning. When entering fire area wear NIOSH/OSHA approved, self-contained breathing apparatus and full protective gear.

Unusual Fire and Explosion Conditions: Vapors may be ignited by heat or sparks. Vapors are heavier than air and may travel to distant sources of ignition and flash back. Heat-exposed containers may burst. Material may collect static charges which can cause an incendiary electrical discharge. Empty container contains product residues. Do not pressurize, cut, weld, drill, grind or expose empty containers to heat flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death.

Hazardous Combustion By-Products: CO, CO₂, N₂O, HCN, unburned hydrocarbons, toxic fumes.

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Immediately evacuate all non-essential personnel to safe places. Emergency responders should wear positive pressure supplied air respirator with full face piece and proper protective gear before entering the affected area.

Regulatory Notifications: Waste of this product is defined as hazardous according to U.S. EPA. Spill reporting requirements and reportable quantities vary by region. Consult all applicable state and local regulations. For Canada, observe all precautions noted above.

Containment and Clean-up: Remove all sources of ignition. Provide ventilation. Respiratory protection is recommended during spill clean-up. Stop leak if possible without risk. Prevent liquids from entering sewers, drains or waterways by diking with sand or earth. Absorb with vermiculite or other absorbent material, then flush area with decontamination solution. Put in open drums. Treat and clean with decontamination solution consisting of water containing 4-8% ammonia and 2% detergent.

7. HANDLING AND STORAGE INFORMATION

Handling: Provide good ventilation. Avoid prolonged contact with the skin. Air circulations and exhaustion of isocyanate or solvent vapors must be maintained until the coatings have fully cured to insure that no potential fire, explosion or health hazard remains. Use solvent resistant gloves. Avoid rubbing eyes while handling. Respiratory caution to be taken if the cured product is ground or sanded as this may generate hazardous dusts.

Storage: Store in cool, dry, ventilated space away from direct sunlight. Keep away from heat, sparks, open flames, electrical equipment, welding torches, pilot lights, etc. Store at 10-30° C

Empty Container Warnings

Drums: Do not reuse empty drums or containers. Do not cut, drill, grind or weld on or near the empty drum.

Plastic: Do not reuse empty containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

Component	CAS No.	Exposure Limit
Quartz (respirable)	14808-60-7	0.05 mg/m ³ TWA, NIOSH
Toluene diisocyanate	26471-62-5	0.005ppm OSHA PEL
Aromatic hydrocarbon solvent	64742-95-6	100ppm ACGIH TWA

Personal Protective Equipment

Eye/Face Protection: Wear safety goggles

Skin Protection: Use solvent resistant gloves and long sleeved clothing.

Respiratory Protection: If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied air respirator with a full-face piece during application. After application use CCR (Chemical Cartridge Respirator).

Personal Hygiene: Avoid rubbing eyes during handling. Wear chemical tight goggles or full face shield. Use good personal hygiene practices to avoid incidental ingestion.

Engineering Controls/Work Practices

Ventilation: Provide local exhaust or area ventilation to maintain concentration of vapors below TLV.

Use explosion proof ventilation equipment. Take care not to draw vapors into non-explosion proof or spark generating equipment or into occupied office areas or enclosed areas with inhabitants.

Other: Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating, smoking and using toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pigmented viscous liquid	Vapor Pressure: N/D
Odor: Typical solvent odor	Octanol/Water Coefficient: N/D
Physical state: Viscous liquid	Vapor Density (air=1): > air
PH: Not applicable	Percent Volatile by Volume: 15-25
DOT Corrosively: Not applicable	Volatile Organic Content: < 220 gm/liter
Boiling Point: 320 to 486 F	Molecular Weight: NA
Melting Point: NA	Average Carbon Number: NA
Specific Gravity: 1.2	Viscosity @ 100F: NA
Pour Point: NA	Viscosity @ 40C: NA
Solubility in Water: Negligible	

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable under normal conditions. Avoid heat, sparks, flames

Conditions to Avoid: Avoid contact with strong oxidizing materials and bases. Avoid contact with water.

Incompatible Materials to Avoid: Strong oxidizers. Alkali metals.

11. TOXICOLOGICAL INFORMATION (will only print available data)

Primary Eye Irritation: Irritating

Primary Skin Irritation: Irritating

Acute Dermal Toxicity: NA

Subacute Dermal Toxicity: NA

Dermal Sensitization: NA

Inhalation Toxicity: NA

Inhalation Sensitization: NA

Oral Toxicity: Mutagenicity: NA

Carcinogenicity: Diisocyanates are suspect carcinogens. When ingested, diisocyanates have caused cancer in certain animals. Crystalline silica is a carcinogen, listed as Human Carcinogen Category 1 in IARC. California Proposition 65 Chemicals and NIOSH also list respirable crystalline silica as carcinogenic. Keep it below 0.05 mg/m³.

Reproductive Toxicity: NA

Teratogenicity: NA

Immunotoxicity: NA

Neurotoxicity: NA

Other: NA

No other toxicological information available

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Not known.

Terrestrial Toxicity: Not known

Chemical Fate and Transport: Not known.

No other ecological information available

13. DISPOSAL INFORMATION

Regulatory Information: Consult all regulations (federal, state, provincial, local etc.) or a qualified waste disposal firm when characterizing waste for disposal.

Waste Disposal Methods: Mix the chemical with an inert material such as sand, vermiculite, etc. and place in a suitable container. Dispose of in accordance with federal, state and local environmental control laws.

14. TRANSPORTATION INFORMATION

This section is provided to assist in the basic domestic DOT shipping classification of this product and does not contain all regulatory transportation details. Review all applicable domestic air and vessel and all international air, vessel and ground transportation regulations for other requirements and restrictions

DOT Basic Description: Paint
Hazard Class: 3
UN Number: UN 1263
Packing Group: III
Description: Combustible Liquid, n.o.s.
Other: Not regulated for non-bulk domestic ground shipments for packaging of 450 liters (119 gallons) or less (DOT 49CFR 173.150 (f)).

IATA UN Number: UN 1263
IATA Air Shipping Name: Paint
IATA Hazard Class: 3
IATA Packing Group: III
IATA / IMDG Description: UN1263, Paint, Class 3, PG III, Flammable Liquid

15. REGULATORY INFORMATION

Regulatory Lists

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory or exempt from listing on the TSCA Inventory.

SARA 311/312 Categories

Acute: Yes **Chronic:** Yes **Fire:** Yes **Pressure:** Yes **Reactive:** Yes

Sara Section 313: This product contains the following Sara, Title III, Section 313 Chemicals:

Chemical	CAS Number
Toluene diisocyanate	26471-62-5
Quartz	14808-60-7
Titanium Dioxide	13463-67-7

Regulatory Lists Searched

Health & Safety:

Environmental: NA

International: NA

State: Fl, MA, MN, PA, RI

National Inventories: NA

California Proposition 65 Information: Warning! This product contains detectable components, including the following components, which are substances or belong to classes of substances known to the State of California to cause cancer, birth defects and/or other reproductive harm.

Chemical	CAS Number
Toluene diisocyanate	26471-62-5
Quartz	14808-60-7
Titanium Dioxide	13463-67-7

Canadian Regulations

DSL/NDSL: The components of this product are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substance List (NDSL).

WHMIS Hazard Class: B3 D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Other Regulations: No other information available

16. OTHER INFORMATION

HMIS ratings – Health: 2 Flammability: 2 Reactivity: 1 Personal Protection: G

DISCLAIMER: The information contained herein is accurate to the best of our knowledge and belief. However, the conditions of handling and use are beyond our control and we make no guarantee of results and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. This data and information is furnished upon the condition that the person receiving it shall make his own determination of the conditions for safe use of this product.

Legend: N.A. – Not Applicable, N.E. – Not Established, N.D. – Not Determined

SDS Revisions **Previous Version Date:** 1/03/11 **Revision Date:** 05/22/15