Tuff Toe

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 07/19/2024 Date of Issue: 02/01/2017 Version: 1.1

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Tuff Toe

Synonyms: Polyurethane

1.2. Intended Use of the Product

Use of the Substance/Mixture: Shoe repair and protection.

1.3. Name, Address, and Telephone of the Responsible Party

Company, Manufacturer

Tuff Toe, Inc.
5443 E. La Palma Ave
Anaheim, CA 92807
T: 714-997-9585
www.tufftoe.com

1.4. Emergency Telephone Number No additional information available

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Acute Tox. 4 (Oral)
Acute Tox. 4 (Inhalation:dust,mist)
Skin Irrit. 2
Eye Irrit. 2A
Resp. Sens. 1
Skin Sens. 1
Carc. 2
STOT SE 3
STOT RE 2
Aquatic Chronic 3

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : Harmful if swallowed or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe vapors, mist, or spray.
Wash hands, forearms, and other exposed areas thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.

Avoid release to the environment.
Wear protective gloves, protective clothing, and eye protection.
[In case of inadequate ventilation] wear respiratory protection.
If swallowed: Call a poison center or doctor if you feel unwell.
If on skin: Wash with plenty of water.
If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Call a poison center or doctor if you feel unwell.
Get medical advice/attention if you feel unwell.
Specific treatment (see section 4 on this SDS).
Rinse mouth.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center or doctor.
Take off contaminated clothing and wash it before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. 9Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Proprietary Ingredient 1*	(CAS No) Trade Secret	Proprietary	Acute Tox. 4 (Oral) Skin Irrit. 2 Eye Irrit. 2A Resp. Sens. 1 Skin Sens. 1 STOT SE 3
Proprietary Ingredient 2*	(CAS No) Trade Secret	Proprietary	Acute Tox. 4 (Inhalation:dust,mist) Skin Irrit. 2 Eye Irrit. 2A Resp. Sens. 1 Skin Sens. 1 Carc. 2 STOT SE 3 STOT RE 2
Proprietary Ingredient 3*	(CAS No) Trade Secret	Proprietary	Acute Tox. 4 (Oral) Skin Sens. 1 Aquatic Chronic 2
Proprietary Ingredient 4*	(CAS No) Trade Secret	Proprietary	Eye Irrit. 2A

Proprietary Ingredient 5*	(CAS No) Trade Secret	Proprietary	Acute Tox. 3 (Inhalation:dust,mist) Skin Irrit. 2 Eye Irrit. 2A Resp. Sens. 1 Skin Sens. 1 STOT SE 3 STOT RE 2
Proprietary Ingredient 6*	(CAS No) Trade Secret	Proprietary	Acute Tox. 4 (Oral) Skin Sens. 1 Aquatic Chronic 2

Full text of H-phrases: see section 16

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Harmful if swallowed. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. May cause damage to organs through prolonged or repeated exposure.

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs (Respiratory system.) through prolonged or repeated exposure (Inhalation).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity: Hazardous reactions will not occur under normal conditions. Reacts with water releasing carbon dioxide and heat. Build up of internal pressure may cause container to rupture.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2). Nitrogen oxides. Hydrocarbons. Hydrogen cyanide.

Other Information: 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

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Ventilate area.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Product may react with water generating heat and gas. Pressure build-up may be rapid. Exposure to elevated temperatures will accelerate this reaction.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapors. Avoid contact with skin, eyes and clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Water.

Storage Area: Avoid contact with water.

7.3. Specific End Use(s)

Shoe repair and protection.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

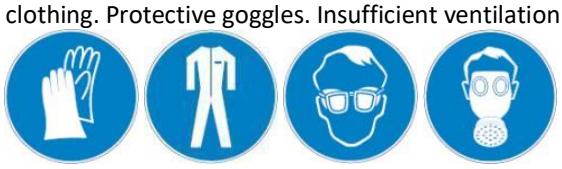
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Proprietary Ingredient 2		
USA ACGIH	ACGIH TWA (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	0.005 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	0.2 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.020 ppm
USA IDLH	US IDLH (mg/m³)	75 mg/m³
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	0.2 mg/m³
USA OSHA	OSHA PEL (Ceiling) (ppm)	0.02 ppm

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when toxic gases may be released.

Personal Protective Equipment : **For occupational/workplace settings and bulk quantities**: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing : **In bulk quantities:** Chemically resistant materials and fabrics.

Hand Protection : **In bulk quantities:** Wear protective gloves.

Eye Protection : **In bulk quantities:** Chemical safety goggles.

Skin and Body Protection : **In bulk quantities:** Wear suitable protective clothing.

Respiratory Protection : **In bulk quantities:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber
Odor	: No data available
Odor Threshold	: No data available
pH	: Not available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: > 110 °C Closed Cup (230 °F)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions. Reacts with water releasing carbon dioxide and heat. Build up of internal pressure may cause container to rupture.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water.

10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Oral: Harmful if swallowed. Inhalation:dust,mist: Harmful if inhaled.

Tuff Toe	
ATE (Oral)	540.19 mg/kg body weight
ATE (Dust/Mist)	2.38 mg/l/4h
Proprietary Ingredient 1	
ATE (Oral)	500.00 mg/kg body weight
Proprietary Ingredient 2	
LD50 Oral Rat	31600 mg/kg
LD50 Dermal Rabbit	> 9400 mg/kg
LC50 Inhalation Rat	369 mg/m³ (Exposure time: 4 h)
ATE (Dust/Mist)	1.50 mg/l/4h
Proprietary Ingredient 4	
LD50 Oral Rat	29000 mg/kg
LD50 Dermal Rabbit	> 3000 mg/kg
Proprietary Ingredient 5	
LD50 Oral Rat	5000 mg/kg body weight
LD50 Dermal Rabbit	9400 mg/kg body weight
LC50 Inhalation Rat	0.56 mg/l/4h (based on 2.24 mg/L - 60 minute value)
Proprietary Ingredient 3	
ATE (Oral)	500.00 mg/kg body weight
Proprietary Ingredient 6	
ATE (Oral)	500.00 mg/kg body weight

Skin Corrosion/Irritation: Causes skin irritation.
pH: Not available

Serious Eye Damage/Irritation: Causes serious eye irritation.
pH: Not available

Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Proprietary Ingredient 2	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: May cause damage to organs (Respiratory system.) through prolonged or repeated exposure (Inhalation).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : Harmful to aquatic life with long lasting effects.

Proprietary Ingredient 4	
LC50 Fish 1	> 1000 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

Tuff Toe	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Tuff Toe	
Bioaccumulative Potential	Not established.
Proprietary Ingredient 4	
Log Pow	0.48 (at 25 °C)

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT: THIS COMPOUND IS A MIXTURE

Proper Shipping Name : OTHER REGULATED SUBSTANCES, LIQUID, N.O.S., RQ (Methylene Diphenyl Diisocyanate)
Hazard Class : 9
Identification Number : NA3082
Label Codes : 9
Packing Group : III
ERG Number : 171



Reportable quantity 5000 lbs. (2270kg)
Single containers less than 5,000 lbs are not regulated.

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Tuff Toe	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
Proprietary Ingredient 1	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
Proprietary Ingredient 2	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
SARA Section 313 - Emission Reporting	1.0 %
Proprietary Ingredient 4	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Proprietary Ingredient 5	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C))
Proprietary Ingredient 3	

Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance
Proprietary Ingredient 6	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	P - P - indicates a commenced PMN substance

15.2. US State Regulations

Proprietary Ingredient 2
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 02/16/2017

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Resp. Sens. 1	Respiratory sensitisation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)