Revision Number: 005.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **LOCTITE TITEFOAM**
Product type: Foam, 1-component with propellant gas
Restriction of Use: None identified
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 1988753

Region: United States
Contact information:
Telephone: +1 (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
DANGER:	CONTENTS UNDER PRESSURE. EXTREMELY FLAMMABLE AEROSOL. CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE AEROSOL.	1
GASES UNDER PRESSURE	Compr. Gas
SKIN IRRITATION	2
EYE IRRITATION	2A
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

PICTOGRAM(S)

Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection. In case of inadequate ventilation wear respiratory protection.

Response:

IF ON SKIN: Wash with plenty of water. IF INHALED: If breathing is difficult, remove victim 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 skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing.

Storage:

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal:

Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

2 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Polyurethane prepolymer	Proprietary	70 - 80
Dimethyl ether	115-10-6	10 - 20
Methylenebis(phenylisocyanate)	101-68-8	5 - 10
Isobutane	75-28-5	1 - 5
Propane	74-98-6	1 - 5
Butane	106-97-8	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact: Fresh foam : Wipe off affected skin area immediately with a soft cloth and then remove residues with vegetable oil; apply skin care product. Cured foam can be removed only mechanically. Immediately wash skin thoroughly with soap and water. Remove contaminated clothes.

Eye contact: Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.

Ingestion: Do not induce vomiting, seek medical advice immediately.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: powder foam Carbon dioxide. Do not use water.

Special firefighting procedures: Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Wear protective equipment.

Unusual fire or explosion hazards: Cool aerosol containers with jet of water. Containers may explode. Contents under pressure.

Hazardous combustion products: Isocyanate vapors In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Remove all sources of ignition. Ventilate area. Wear appropriate personal protective equipment.

Clean-up methods: Allow to solidify. Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Do not puncture or incinerate pressurized containers. Ensure adequate ventilation, especially in confined areas. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep out of the reach of children. When using do not eat, drink or smoke. Wear suitable protective clothing, gloves and eye/face protection. Refer to Section 8.

Storage: Store between 50°F and 80°F. (10° and 27°C) Store away from heat, sparks, flames, or other sources of ignition. Do not store above 49 ºC (120 ºF). Do not cut or weld container.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyurethane prepolymer	None	None	None	None
Dimethyl ether	None	None	1,000 ppm (1,880 mg/m3) TWA	None
Methylenebis(phenylisocyanate)	0.005 ppm TWA	0.02 ppm (0.2 mg/m3) Ceiling	None	None
Isobutane	1,000 ppm STEL	None	None	None
Propane	Included in the regulation but with no data values. See regulation for further details	1,000 ppm (1,800 mg/m3) PEL	None	None
Butane	1,000 ppm STEL	None	None	None

Engineering controls: Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

Eye/face protection: Wear safety glasses with side shields.

Skin protection: Rubber gloves recommended. Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Aerosol
Color:	Yellow-white
Odor:	slightly, of ether
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	> 100 mm hg (20 °C (68°F))
Boiling point/range:	< -17.7 °C (< 0.1 °F)Compressed Gas.
Melting point/ range:	Not available.
Specific gravity:	1.107
Vapor density:	< 1 (Air = 1)
Flash point:	-104 °C (-155.2 °F)
Flammable/Explosive limits - lower:	0.4 % The product is not explosive. The formation of explosive vapor/air mixtures is possible.
Flammable/Explosive limits - upper:	32 % The product is not explosive. The formation of explosive vapor/air mixtures is possible.
Autoignition temperature:	Not available.
Flammability:	Extremely flammable aerosol.
Evaporation rate:	10 (Butyl acetate = 1)
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	19.28 %; 208.6 g/l (by weight, calculated using CARB method; g/L less water, less exempts calculated using SCAQMD method)
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Not available.
Hazardous reactions:	May occur.
Hazardous decomposition products:	carbon dioxide carbon monoxide nitrogen oxides
Incompatible materials:	Alcohols. Metal compounds. Strong bases. Water.
Reactivity:	Not available.
Conditions to avoid:	Keep away from sources of ignition and naked flames.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Inhalation, Ingestion, Skin

Potential Health Effects/Symptoms

Inhalation: Inhalation of mist or spray may be harmful. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure). Persons suffering from allergic reactions to isocyanates should avoid contact with the product. May cause dizziness, incoordination, headache, nausea, and vomiting.

Skin contact: Persons suffering from allergic reactions to isocyanates should avoid contact with the product. Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction. This product may discolor the skin. Cured material is difficult to remove.

Eye contact: Contact with eyes can cause eye irritation.

Ingestion: Can cause irritation of mucous membranes. Nausea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Polyurethane prepolymer	None	No Records
Dimethyl ether	Inhalation LC50 (Rat, 4 h) = 308.5 mg/l Inhalation LC50 (Rat, 4 h) = 164000 ppm	Irritant, Central nervous system
Methylenebis(phenylisocyanate)	Inhalation LC50 (Rat, 4 h) = 0.38 mg/l Inhalation LC50 (Rat, 4 h) = 0.369 mg/l	Irritant, Respiratory, Allergen
Isobutane	None	Cardiac, Central nervous system, Lung
Propane	None	Cardiac, Central nervous system, Irritant
Butane	Inhalation LC50 (Rat, 4 h) = 658 mg/l	Cardiac, Central nervous system, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyurethane prepolymer	No	No	No
Dimethyl ether	No	No	No
Methylenebis(phenylisocyanate)	No	No	No
Isobutane	No	No	No
Propane	No	No	No
Butane	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Aerosols
Hazard class or division:	2.1
Identification number:	UN 1950
Packing group:	None

International Air Transportation (ICAO/IATA)

Proper shipping name:	Aerosols, flammable
Hazard class or division:	2.1
Identification number:	UN 1950
Packing group:	None

Water Transportation (IMO/IMDG)

Proper shipping name:	AEROSOLS
Hazard class or division:	2.1
Identification number:	UN 1950
Packing group:	None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Sudden Release

CERCLA/SARA Section 313: None above reporting de minimis.

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

Hazardous Materials Information Review Act: 10782, 2016-12-12

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 2,9

Prepared by: Mary Ellen Roddy, Manager, Regulatory Affairs

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