

Section 1 Identification

Product identifiers

Freeman T-60 Thixo

Relevant identified uses of the substance or mixture and uses advised against

Third component thickening additive for with polyurethane resin system.

For industrial/professional use only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company

1101 Moore Road, Avon, OH 44011 USA

Telephone: +1 (440) 934-1902

E-mail: contactus@freemansupply.com

24-hour emergency telephone number

CHEMTREC (800) 424-9300

Section 2 Hazard Identification

GHS Classification in Accordance with 29 CFR 1910.1200 (OSHA HCS)

Acute Toxicity (Inhalation) – Category 4

Skin Irritation – Category 2

Eye Irritation – Category 2B

Respiratory Sensitizer – Category 1

Skin Sensitizer – Category 1

Specific Target Organ Toxicity – Single Exposure Category 3

Specific Target Organ Toxicity – Repeated Exposure Category 2

Label Elements



Danger

Hazard Statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H320 Causes eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs (lungs and respiratory system) through prolonged or repeated exposure.

Precautionary Statements

P260 Do not breathe fumes, vapors, mists or sprays.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves, eye protection, and face protection.

P284 In case of inadequate ventilation, wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P317 Get medical help.

P319 Get medical help if you feel unwell.

Section 2 Hazard Identification

P333+P317 If skin irritation or rash occurs: Get medical help.
 P337+P317 If eye irritation persists: Get medical help.
 P342+P316 If experiencing respiratory symptoms: Get emergency medical help immediately.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents and container in accordance with local, regional and national regulations.

Supplemental Information

Individuals sensitized to isocyanates should discontinue use. Long-term overexposure to isocyanates may cause lung damage. This is one part of a two-part system. Read and understand the hazard information on part B before using.

Section 3 Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration (%)
Methylene diphenyl diisocyanate (MDI) (includes isomers and oligomers)	26447-40-5	<100
MDI prepolymer	68092-58-0	45 - 55

Other ingredients are not listed because they are either not hazardous or are below cut-off / concentration thresholds.

Section 4 First Aid Measures

Description of first aid measures

Eye Contact: Rinse thoroughly with water for at least 15 minutes, holding the eyelids open to be sure the material is washed out. Get medical attention if irritation develops or persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation develops or persists. Launder clothing before re-use. Discard items that cannot be decontaminated.

Inhalation: Remove person to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if you feel unwell.

Most Important Symptoms/Effects

Harmful if inhaled. May cause allergic skin and/or respiratory reaction in sensitized persons. Symptoms include skin rash, wheezing, shortness of breath and other asthma symptoms. Prolonged inhalation overexposure may damage the lungs and respiratory system.

Indication of Immediate Medical Attention/Special Treatment

Get immediate medical attention if inhaled. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Persons sensitized to isocyanates should consult a physician regarding working with respiratory irritants or sensitizers.

Section 5 Fire-Fighting Measures

Extinguishing Media

Use water fog, foam, carbon dioxide or dry chemical. Do not direct solid water stream into hot product, since it may cause violent steam generation or eruption.

Specific Hazards

Not classified as flammable. Product will burn under fire conditions.

Special Protective Equipment & Precautions for Fire-Fighters

Wear positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

Section 6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Remove ignition sources. Clear non-emergency personnel from the area. Wear a respirator and protective equipment to prevent eye and skin contact. Ventilate area. Caution – spill area may be slippery.

Methods and Materials for Containment and Cleanup

Cover with inert absorbent material and collect into a container for disposal. Do not seal the container since carbon dioxide is generated on contact with moisture and dangerous pressure buildup can occur. Decontaminate floor area with a mixture of water plus isopropyl alcohol (20%), household ammonia (10%) and detergent (2%).

Section 7 Handling and Storage

Safe Handling

Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

Safe Storage

Store indoors at 60 to 95°F (15-35°C). Store in original, unopened containers. Protect from atmospheric moisture and water since MDI reacts with water to form carbon dioxide leading to potentially dangerous pressure build up in sealed containers.

Section 8 Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	OSHA PEL	ACGIH TLV
Methylene diphenyl diisocyanate (MDI)	0.02 ppm (C)	0.005 ppm TWA

Appropriate Engineering Controls

Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protective Equipment (PPE)

Respiratory Protection: In the absence of good ventilation, use a NIOSH-approved respirator with organic vapor cartridges. Respirator selection and use should be based on contaminant type, form and concentration. For higher exposures or in an emergency, use a supplied-air respirator.

Skin Protection: Wear impervious gloves, such as butyl rubber or nitrile rubber.

Eye Protection: Wear chemical safety glasses/goggles.

Section 8 Exposure Controls/Personal Protection

General Hygienic Practices

Wear impervious clothing to prevent skin contact and contamination of personal clothing. An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

Section 9 Physical and Chemical Properties

Appearance	Clear yellow/amber liquid
Odor	Mild
Odor threshold	0.4 ppm (MDI)
pH	Not applicable
Melting or freezing point	No data available
Boiling point	200°C (literature, decomposes)
Flash point	>224°C (closed cup)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Flammability limits	No data available
Vapor pressure	≤0.00001 mm Hg @ 25°C (literature)
Vapor density	>1
Relative density	1.2 at 20°C
Water solubility	Insoluble
Coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

Section 10 Stability and Reactivity

Reactivity: Diisocyanates react with many materials and the rate of reaction increases with temperature. Reaction with water generates carbon dioxide and heat.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by strong bases or water. Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.

Conditions to Avoid: Avoid moisture and temperatures below 60°F and above 95°F to protect product integrity and prevent pressure build up in closed containers.

Section 11 Toxicological Information

Acute Toxicity Values

Ingredient	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
MDI (CAS 26447-40-5):	>2,000 mg/kg	>9,400 mg/kg	1.12 mg/L, 4hr

Acute and chronic health effects

Eye Contact: Causes eye irritation.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Section 11 Toxicological Information

Inhalation: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. At room temperature, vapors are minimal due to low volatility. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation and possibly pulmonary edema. May cause respiratory sensitization. For individuals sensitized to isocyanates, exposure may result in allergic respiratory reactions (e.g., coughing, wheezing, difficulty breathing).

Ingestion: No data available.

Germ Cell Mutagenicity: Components are not classified as mutagens.

Carcinogenicity: Components are not classified as carcinogens.

Reproductive Toxicity: Components are not classified as reproductive toxins.

Specific Target Organ Toxicity: May cause respiratory irritation, drowsiness or dizziness.

Section 12 Ecological Information

Ecotoxicity: No data available.

Persistence and Degradability: Not readily biodegradable.

Bioaccumulative Potential: Not expected to bioaccumulate.

Mobility in Soil: Movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

Section 13 Disposal Considerations

Follow applicable federal, state, and local regulations. Contact a licensed contractor for detailed recommendations. Do not dump into sewers, waterways or on the ground. Upon exposure to moisture, product forms an inert, non-hazardous solid.

Section 14 Transport Information

DOT/IMDG/IATA

Not regulated

Section 15 Regulatory Information

US Federal Regulations

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements.

SARA TITLE III, Section 313 Toxic Chemicals: This product contains chemicals subject to SARA Title III Section 313 reporting requirements: Diisocyanates Category (N120) 45-55%

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All components in this product are listed on TSCA.

US State Regulations

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer and/or reproductive harm. www.P65Warnings.ca.gov

Section 16 Other Information

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Initial release date: July 28, 2022

Previous release date: July 28, 2022

Current revision date: March 19, 2025