

MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

Section 1: Chemical Product / Company Identification

Material Identification

Cured Polyurethane Elastomer

Company identification / Mailing Address

Ultra-Flex Moulding Inc.
1021 W. Mission Rd. Ste. B&C
Escondido, CA 92029

Section 2: Composition, Information on ingredients

Hazardous Components 1% or greater: carcinogens 0.1% or greater (Specific chemical identity: Common Name(s))	CAS	PEL	TLVs
None	N/A	N/A	N/A

POLYURETHANE ELASTOMERS ARE FULLY REACTED POLYMERS FORMING ARTICLES WHICH ARE NOT CONSIDERED HAZARDOUS UNDER OSHA'S CRITERIA 29 CFR 1910.1200. HOWEVER, HAZARDOUS DUSTS, VAPORS, GASES, OR FUMES MAY BE RELEASED BY MECHANICAL OR THERMAL PROCESSING, OR BY THERMAL DECOMPOSITION.

Section 3: Hazard Identification

Emergency Overview

Acute: None known from solid article Fumes from hot wire cutting can be irritating and lead to coughing. These fumes could contain traces of MDI, other isocyanates, and/or curatives. Exposure to isocyanates may produce an asthma-like reaction, with shortness of breath, wheezing or cough, which may occur after re-exposure to very low levels. Chronic: Animal studies indicate that chronic inhalation or overexposure of dusts may cause inflammation of the lungs, fibrosis, and airway destruction.

Severe Immediate Hazards

Dusts from grinding operations may aggravate existing lung disorders when proper protection is not used.

Potential Health Effects

Routes of Exposure: Inhalation

Lengths of Exposure: Lifetime

Severity of Effect: Mild

Target Organs: Lung

Effects / Symptoms

See acute and chronic effects.

Carcinogenicity

Cured polyurethane is not listed as a carcinogen.

Section 4: First Aid Procedures

Procedures

Flush eyes with water if dust from grinding causes irritation.

Section 5: Fire Fighting Measures

Flammable Properties

Flash Point: Not Applicable

Flammable Limits: LEL: Not Applicable UEL: Not Applicable

Extinguishing Media

Water, dry chemical, foam, or carbon dioxide

Fire Fighting Instructions

Evacuate non-emergency personnel to a safe area. Firefighters should use self-contained breathing apparatus. Avoid breathing smoke, fumes, and decomposition products. Use water spray to quench smoldering elastomers. Product may melt after ignition to form flammable liquids. Burning produces intense heat, dense smoke, and toxic gases, such as carbon monoxide, oxides of nitrogen, and traces of hydrogen cyanide. Dusts from processing operations may be combustible.

Section 6: Accidental Release Measures

Safeguards (Personal)

None

Spill Clean Up

Pick up and handle as any other solid material.

Section 7: Handling and Storage

Handling

Cutting elastomer by hot wire or hot branding, or other thermal processing can form decomposition products. Local exhaust ventilation should be used to remove any fumes. If isocyanates or curatives are emitted, ventilation must be sufficient to ensure levels below the TLV for MDI (0.005 PPM TWA), other isocyanates, or curatives. Also, see respiratory protection below.

Storage

Store elastomers in areas equipped with sprinkler systems. Store away from sparks, flames, or other ignition sources.

Section 8: Exposure Controls, Personal Protection

Engineering Control.

Local exhaust recommended for thermal processing operations, as required to reduce dust, gas, and vapor fume exposure below OSHA levels.

Personal Protective Equipment

Eye/Face Protection: None required in normal use. For grinding operations, use safety goggles and face shield.

Skin Protection

None required

Respiratory Protection

Use NIOSH approved respirator. For grinding operations - wear a dust respirator. If generating gas, vapor, and fumes, from hot wire, hot knife, or other thermal processing operations, - wear an air-purifying respirator with organic cartridge or supplied-air respirator if ventilation is inadequate.

General Protection

None required.

Section 9: Physical and Chemical Properties

Appearance and Odor	Physical State
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Solid, no odor	Solid
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PH	Vapor Pressure
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N/A	N/A
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Vapor Density	Boiling Point
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N/A	N/A
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Freezing Melting Point

Melts 380°F - 460°F

May degrade above 300°F

Solubility In Water

Insoluble

Specific Gravity

1.05-1.26

Evaporation Rate

N/A

Section 10: Stability and Reactivity

Stable

Conditions to Avoid: None

Incompatibility With Other Material

Strong acids or bases

Hazardous Decomposition or By-products

Decomposition through burning produces fumes consisting of organic particulate, gaseous hydrocarbons carbon dioxide, carbon monoxide and may contain traces of diphenylmethane diisocyanate (MDI), other isocyanates, curatives, hydrogen cyanide, acrolein and oxides of nitrogen.

Hazardous Polymerization Will Not Occur

Conditions to Avoid: None

Section 11: Toxicological Information

Toxicological Data

Under normal conditions not applicable.

Section 12: Ecological information

Ecological Data

Under normal conditions not applicable

Section 13: Disposal Considerations

Waste Disposal

Not considered a hazardous material. Dispose of material according to any local, state, and federal regulations.

Section 14: Transport Information

Shipping Information

Not regulated as a hazardous material.

Section 15: Regulatory information

U.S. Federal Regulations

EPA SARA Title III hazard class: none.

EPA SARA Title III Section 313 (40CFR372) Toxic Chemicals present in quantities greater than the "*de minimis*" level are: none.

State Regulations

None

International Regulations

None

Section 16: Other Information

Additional Information

None

Note: This information is believed to be accurate and represents the information currently available. However, no warranty is expressed or implied with respect to such information, and no liability resulting from its use is assumed. Users should make their own investigations to determine the suitability of the information for their particular purposes.