

ISOSET® UX100 ADHESIVE
33496

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	ISOSET® UX100 ADHESIVE
Product code	33496
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, yellow, Yellow

WARNING! MAY BE HARMFUL IF INHALED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS. MAY CAUSE ALLERGIC SKIN REACTION.

Potential Health Effects

Routes of exposure

Inhalation, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects)

Ingestion

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Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

Inhalation

Breathing of vapor or mist is possible. Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing this material may be harmful. This product is a two-part urethane system. While breathing 4,4'-diphenylmethane diisocyanate (MDI) can be harmful or fatal, breathing MDI is not expected during normal use of this system.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: respiratory tract, skin, lung (for example, asthma-like conditions)

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, discomfort in the chest, Headache, Shortness of breath, Exposure to this product (or a component) may cause an allergic reaction (narrowing of the air passages of the lungs resulting in difficult breathing, tightness in the chest, coughing and wheezing) in some sensitive individuals. Other symptoms of an allergic reaction may include itchy and watery eyes, runny and stuffy nose, sweating, flushing, hives, rapid heart rate, and lowered blood pressure.

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: respiratory sensitization

Carcinogenicity

In a two-year inhalation study in rats, exposure to polymeric methylene bisphenylisocyanate (MDI) aerosol caused a significant increase in benign (noncarcinogenic) lung tumors, along with a single carcinogenic lung tumor, at the highest dose only (6 mg/m³). The tumors occurred along with irritation of the respiratory tract and the accumulation of a yellow material in the lungs. There was irritation only at 1.0 mg/m³ and no effect at 0.2 mg/m³. MDI is not listed as carcinogenic by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

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No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
POLY(METHYLENEPHENYLENE)	9016-87-9	>=30-<40%
POLYISOCYANATE		
4,4'-DIPHENYLMETHANE	101-68-8	>=30-<40%
DIISOCYANATE		
METHYLENE	26447-40-5	>=5-<10%
DIPHENYLISOCYANATE		

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂), Dry chemical, Alcohol-resistant foam, regular foam (such as AFFF), Agents approved for class B hazards or water fog.

Hazardous combustion products

carbon dioxide and carbon monoxide, Hydrogen cyanide (hydrocyanic acid), nitrogen compounds, various hydrocarbons

Precautions for fire-fighting

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

Flammability Class for Flammable Liquids

Combustible Liquid Class IIIB Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

No data

Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Absorb liquid on vermiculite, floor absorbent or other absorbent material.

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7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

No data

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

**4,4'-DIPHENYLMETHANE
DIISOCYANATE**

101-68-8

ACGIH	time weighted average	0.005 ppm
NIOSH	Recommended exposure limit (REL):	0.005 ppm
NIOSH	Recommended exposure limit (REL):	0.05 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	0.020 ppm
NIOSH	Ceiling Limit Value and Time Period (if specified):	0.2 mg/m3
OSHA Z1	Ceiling Limit Value:	0.02 ppm
OSHA Z1	Ceiling Limit Value:	0.2 mg/m3
OSHA Z1A	Ceiling Limit Value:	0.02 ppm
OSHA Z1A	Ceiling Limit Value:	0.2 mg/m3
US CA OEL	Time Weighted Average (TWA)	0.005 ppm
	Permissible Exposure Limit (PEL):	
US CA OEL	Time Weighted Average (TWA)	0.051 mg/m3
	Permissible Exposure Limit (PEL):	

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

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Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Wear resistant gloves such as:
butyl-rubber

Respiratory protection

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	No data
Colour	yellowYellow
Odour	No data
Boiling point/boiling range	No data
pH	No data
Flash point	459.9 °F / 237.7 °C
Evaporation rate	No data
Explosion limits	No data
Vapour pressure	0.00 hPa
Vapour density	No data
Density	1.160 g/cm ³ @ 77.0 °F / 25.0 °C 9.67 lb/gal @ 77.00 °F / 25.00 °C
Solubility	No data
Partition coefficient: n-octanol/water	No data
log Pow	no data available

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Autoignition temperature No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with:, excessive heat

Incompatible products

Avoid contact with strong alkalis, strong mineral acids, and water., Avoid contact with:, strong alkalis, strong mineral acids, water

Hazardous decomposition products

carbon dioxide and carbon monoxide, Hydrogen cyanide (hydrocyanic acid), nitrogen compounds, various hydrocarbons

Hazardous reactions

Product can undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

POLY(METHYLENEPHENYLENE) POLYISOCYANATE	LD 50 Rat: > 10,000 mg/kg
4,4'-DIPHENYLMETHANE DIISOCYANATE	LD 50 Rat: 9,200 mg/kg
METHYLENE DIPHENYLISOCYANATE	LD 50 Rat: > 15,800 mg/kg

Acute inhalation toxicity

POLY(METHYLENEPHENYLENE) POLYISOCYANATE	LC 50 Rat: 369 - 490 mg/m ³ , 4 h
4,4'-DIPHENYLMETHANE DIISOCYANATE	LC 50 Rat: 0.369 mg/l , 4 h
METHYLENE DIPHENYLISOCYANATE	LC 50 Rat: 490 mg/m ³ , 4 h

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Acute dermal toxicity

POLY(METHYLENEPHENYLENE) POLYISOCYANATE	LD 50 Rabbit: > 10,000 mg/kg
4,4'-DIPHENYLMETHANE DIISOCYANATE	LD 50 Rabbit: > 7,900 mg/kg
METHYLENE DIPHENYLISOCYANATE	LD 50 Rabbit: > 5,010 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Destroy by incineration in accordance with applicable regulations. Contaminated absorbent, after a sufficient conditioning time of at least 48 hours for deactivation and drying, may be deposited in a landfill in accordance with local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

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15. REGULATORY INFORMATION

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

POLY(METHYLENEPHENYLENE) POLYISOCYANATE	9016-87-9	31.6085%
4,4'-DIPHENYLMETHANE DIISOCYANATE	101-68-8	30.9763%

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302) 16141 lbs

Reportable quantity - Components

POLY(METHYLENEPHENYLENE) POLYISOCYANATE	9016-87-9	none
4,4'-DIPHENYLMETHANE DIISOCYANATE	101-68-8	5000 lbs
METHYLENE DIPHENYLISOCYANATE	26447-40-5	none

	Health	Flammability	Reactivity	Other
HMIS	2*	1	1	
NFPA	3	1	1	

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).