Revision Date: 11/12/2009

Print Date: 6/8/2010

MSDS Number: R0347306

Version: 1.6

Supplied By: StaFast Building Products
7095 Americana Parkway
Reynoldshurg, Ohio 43068
1-800-223-4714
Trade Name: StaDeck Insulation Adhesive

# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE 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)

FOR CHEMICAL EMERGENCY: call Chemtrec at 800-424-9300 24 hours

Product name STADECK INSULATION ADHESIVE

Product code

120447

Product Use Description

No data

# 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

Appearance: liquid, tan

WARNING! MAY BE HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

# Potential Health Effects

## **Exposure routes**

Inhalation, Skin contact, Ingestion

#### Eye contact

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

#### Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, 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

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



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#### Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts 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

There are no data available for assessing risk to the fetus from maternal exposure to this material.



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# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
4,4'-DIPHENYLMETHANE	101-68-8	>=20-<30%
DIISOCYANATE		
POLY(METHYL NEPHENYLENE)	9016-87-9	>=5-<10%
POLYISOCYANATE		
METHYLENE	26447-40-5	>=1.5-<5%
DIPHENYLISOCYANATE		

# 4. FIRST AID MEASURES

### Eves

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.

# **5. FIRE-FIGHTING MEASURES**



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# Suitable extinguishing media

Water mist, Carbon dioxide (CO2), Dry chemical

## **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.

## Flammability Class for Flammable Liquids

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. Neutralize spill with an aqueous solution of ammonia. 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.

# 7. HANDLING AND STORAGE

# Handling



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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

Store in a cool, dry, ventilated area, away from incompatible substances.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Exposure Guidelines**

# 4,4'-DIPHENYLMETHANE 101-68-8 DIISOCYANATE

 DIBOCIAMAID		
ACGIH	time weighted average	0.005 ppm
NIOSH	Recommended exposure limit	0.005 ppm
	(REL):	
NIOSH	Recommended exposure limit	0.05
	(REL):	mg/m3
NIOSH	Ceiling Limit Value and	0.020 ppm
	Time Period (if specified):	<del></del>
NIOSH	Ceiling Limit Value and	0.2 mg/m3
	Time Period (if specified):	•
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	0.005 ppm
	(TWA) Permissible Exposure	
	Limit (PEL):	
US CA OEL	Time Weighted Average	0.051
	(TWA) Permissible Exposure	mg/m3
	Limit (PEL):	<del>-</del>

### 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 exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

# Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

# Skin and body protection

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves such as:

Nitrile rubber

butyl-rubber

Viton (R)

### Respiratory protection

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be persmissible under certain circumstancs where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Form

liquid No data

Colour

tan No data

Odour

Boiling point/boiling range

143.89 °C / 291.00 °F@ 1,013.33 hPa

No data

Flash point

(>)200.1 °F / 93.4 °C

**Evaporation rate Explosion limits** 

No data

No data

Vapour pressure

1.33 hPa @ 68 °F / 20 °C



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Vapour density

No data

Density

1.151 g/cm3 @ 77.00 °F / 25.00 °C 9.589 lb/gal @ 77.00 °F / 25.00 °C

**Solubility** 

No data

Partition coefficient: n-

No data

octanol/water

log Pow

no data available

Autoignition temperature

No data

# 10. STABILITY AND REACTIVITY

# Stability

Stable.

#### Conditions to avoid

excessive heat

# **Incompatible products**

Alcohols, 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

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



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# STAFAST INSULATION ADHESIVE 120447

Acute inhalation toxicity

_		
	4,4'-DIPHENYLMETHANE DIISOCYANATE	LC 50 Rat: 0.369 mg/l , 4 h
	POLY(METHYL NEPHENYLENE) POLYISOCYANATE	LC 50 Rat: 369 - 490 mg/m3, 4 h
	METHYLENE DIPHENYLISOCYANATE	LC 50 Rat: 490 mg/m3, 4 h

Acute dermal toxicity

4,4'-DIPHENYLMETHANE DIISOCYANATE	LD 50 Rabbit: > 7,900 mg/kg
POLY(METHYL NEPHENYLENE) POLYISOCYANATE	LD 50 Rabbit: > 10,000 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 liquid incineration in accordance with applicable 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



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# STAFAST INSULATION ADHESIVE 120447

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

## 15. REGULATORY INFORMATION

# California Prop. 65

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

SARA Hazard Classification

Fire Hazard

Acute Health Hazard

SARA 313 Component(s)

4,4'-DIPHENYLMETHANE

101-68-8

22.82%

DIISOCYANATE

POLY(METHYL

9016-87-9

9.19%

NEPHENYLENE)

**POLYISOCYANATE** 

**New Jersey RTK Label Information** 

POLYMER

NJTS 800986-5574P

4,4'-DIPHENYLMETHANE DIISOCYANATE

101-68-8

POLY(METHYL NEPHENYLENE) POLYISOCYANATE

9016-87-9

POLYMER

NJTS 254504001-5759

METHYLENE DIPHENYLISOCYANATE

26447-40-5

Pennsylvania RTK Label Information

**POLYMER** 

NJTS 800986-5574P

4,4'-DIPHENYLMETHANE DIISOCYANATE

101-68-8

POLY(METHYL NEPHENYLENE) POLYISOCYANATE

9016-87-9

**POLYMER** 

NJTS 254504001-5759

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302)

21913 lbs

**Reportable quantity - Components** 

4,4'-DIPHENYLMETHANE

101-68-8

5000 lbs

DIISOCYANATE



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POLY(METHYL NEPHENYLENE)

9016-87-9

none

**POLYISOCYANATE** 

METHYLENE

26447-40-5

none

DIPHENYLISOCYANATE

	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).