MATERIAL SAFETY DATA SHEET

Manufacture's Name: Date prepared or revised:

March 14, 2008



Information Telephone No: 949-888-7100

SECTION I – PRODUCT IDENTIFICATION

Speed Bond 6643, part A

Urethane adhesive and repair HMIS: H F R PP

3 1 1 M

<u>SECTION II – HAZARDOUS INGREDIENTS</u>

<u>Ingredients</u>	Cas Number	<u>%</u>
Diphenylmethane diisocyanate (MDI)	101-68-8	15 - 40
Diphenylmethane diisocyanate prepolymer	68424-09-9	40 - 70

SECTION III - PHYSICAL DATA

This is a clear, amber colored, medium viscosity liquid. This material has no or very low odor, weakly aromatic.

<u>Boiling Range</u>: <u>Vapor Density</u>: <u>Vapor Pressure</u>: <u>Specific Gravity</u>:

> 400 Deg. F < 1 (water = 1) > 1 (air = 1) $< 10 \text{ x } 4^{-6} \text{ @ } 68\text{F}$ 1.0 - 1.2

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flammability Classification:

Flash Point: > 280°F COC

Extinguishing Media:

Foam, CO2, Dry Chemical.

Unusual Fire And Explosion Hazards:

Water may be used as a blanket for fire extinguishment. If water is used it should be in very large quantities and, if possible, contain the water run off.

Moisture contamination will react to form excessive carbon dioxide gas in closed containers.

Combustion byproducts are oxides of carbon and nitrogen, traces of HCN, and MDI vapors and aerosols

Special Firefighting Procedures:

Observe recommended procedures in handling fire areas. Wear appropriate fire fighting equipment including a self contained breathing apparatus.

SECTION V – HEALTH HAZARD DATA

Hazardous ingredient: LD50 LC50

Diphenylmethane diisocyanate (MDI) > 2000 mg/kg, rabbit dermal 490 mg/m³ rabbit, inhalation

> 5000 mg/kg, rat oral

<u>Carcinogenicity</u> <u>Teratogenicity</u> <u>Reproductive toxicity</u> <u>Mutagenicity</u> N/A N/A N/A N/A

Exposure Limits: TLV = .005ppm TWA (MDI) PEL = .02ppm TWA (MDI)

Effects of Overexposure:

Exposure may result in sensitization (skin). Prolonged or repeated exposure may cause skin irritation (chemical dermatitis) Chronic exposure (above the TLV) may cause irritation in the upper and lower respiratory tracts. Chest pain and or shortness of breath may occur in rare instances.

Primary Route(s) of Entry: Inhalation, Ingestion, skin contact, skin absorption, and eye contact.

Emergency and First Aid Procedures:

Excessive Inhalation: If affected by vapors, move person to fresh air. Apply artificial respiration to person who loses consciousness and call a doctor immediately. Monitor for 2-3hrs for delayed asthmatic type symptoms.

Eye contact: Flush with copious amounts of water (preferably lukewarm) for at least 15 minutes holding eyelids open all the time. Refer individual to a physician or ophthalmologist for immediate follow up.

Skin contact: Thoroughly wash with Soap and water. If irritation persists see a doctor immediately.

Ingestion: DO NOT INDUCE VOMITING if the person is conscious rinse out the mouth and give two glasses of milk or water to drink and call a doctor immediately. (Never give fluids to an unconscious person)

SECTION VI – REACTIVITY DATA

Stability: Stable

Hazardous Polymerization:

Hazardous polymerization may occur with high temperatures associated with fires and or contact with incompatible materials. Byproducts are oxides of carbon and nitrogen, traces of HCN, and MDI vapors and aerosols

Conditions to Avoid:

For maximum product stability maintain a temperature range of 65° - 85°. Avoid temperatures below 40 degrees Fahrenheit. Avoid freezing conditions.

Incompatibility (Materials To Avoid):

Strong mineral acids, bases, oxidizers, metals, and or water.

SECTION VII – SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Dike and absorb spilled material with inert absorbent material such as sand, earth, and sawdust. Use rags to clean up small amounts of spilled material with detergent and water.

Waste Disposal Method:

Collect material contaminated absorbent and rags into a disposable container and dispose of in accordance to local, state, and federal regulations. Consult with your local hazardous waste regulations regarding landfill dumping. Incineration in accordance with applicable regulations is preferred.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

Respiratory Protection:

Wear approved organic vapor respirator unless ventilation equipment is adequate to keep airborne concentrations below the exposure standards.

Ventilation:

General mechanical ventilation may be sufficient to keep product vapor concentrations below specified TLV ranges. If inadequate, use local exhaust.

Protective Gloves:

Use impermeable solvent resistant gloves to protect from skin contact.

Eve Protection:

Use safety goggles, chemical safety glasses and or face shields to protect eyes.

Other Protective Equipment:

Normal work clothing providing complete coverage of arms and legs is sufficient. Any clothing contaminated with product should be washed before reuse. Shoes should be resistant to solvent / chemical absorption. Leather material once contaminated cannot be decontaminated.

Hygienic Practices:

Wash hands after use; avoid contact with skin and clothing. Eye washes and safety showers in the workplace are recommended.

SECTION IX – SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling and Storing:

Keep container s closed when not in use. Do not store or handle near heat, flames and strong oxidants. Store in cool well ventilated area. Rotate stock by using older materials first. Inspect for leaks in all containers.

Other Precautions:

Do not store in freezing areas. Keep above 40 degrees Fahrenheit. Keep out of reach of children.

Disclaimer – The information contained herein is based on data considered accurate. However, no warranty, whether expressed or implied is made.

MATERIAL SAFETY DATA SHEET

Manufacture's Name: Date prepared or revised:

March 14, 2008

MULTICOAT CORPORATION 23331 ANTONIO PARKWAY RANCHO STA. MARGARITA, CA 92688

Information Telephone No: 949-888-7100

SECTION I – PRODUCT IDENTIFICATION

Speed Bond 6643, part B

Urethane adhesive and repair HMIS: H F R PP 2

1 1 M

SECTION II – HAZARDOUS INGREDIENTS

<u>Ingredients</u>	Cas Number	<u>%</u>
Tetrakis (2-hydroxypropyl) ethylenediamine	102-60-3	10 - 30
Bis (pentamethyl pipreidinyl) sebacate	41556-26-7	.1 – 1
Poly (oxyethanediyl), [benzotriazolyl,		
dimethylethyl, hydroxyphenyl, oxypropoxy]	104810-47-1	.1 - 1
Aminoethylpiperazine	140-31-8	.5 - 1.5

SECTION III - PHYSICAL DATA

This is a grey colored, medium viscosity liquid. This material has a slight ammonia like odor.

Evaporation Rate: Boiling Range: Vapor Density: Vapor Pressure: Specific Gravity:

> 390 Deg. F < 1 (water = 1)> 1 (air = 1) N/A1.0 - 1.1

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Classification:

Flash Point: > 275°F COC

Extinguishing Media:

Foam, CO2, Dry Chemical.

Unusual Fire And Explosion Hazards:

Water may be used as a blanket for fire extinguishment. If water is used it should be in very large quantities and, if possible, contain the water run off.

Combustion byproducts are oxides of carbon and nitrogen, hydrocarbon vapors, plus undetermined aliphatic fragments.

Special Firefighting Procedures:

Observe recommended procedures in handling fire areas. Wear appropriate fire-fighting equipment including a self contained breathing apparatus.

SECTION V – HEALTH HAZARD DATA

Hazardous ingredient:LD50LC50Tetrakis (2-hydroxypropyl) ethylenediamine3900 mg/kg, rat, oralN / A

Bis (pentamethyl pipreidinyl) sebacate 3125 mg/kg, rat, oral N / A

Poly (oxyethanediyl), [benzotriazolyl, >5000 g/kg, rat, oral

dimethylethyl, hydroxyphenyl, oxypropoxy] > 2000 g/kg, rat, dermal > 5.8 mg/l (hrs aerosol exp.) inhalation

Aminoethylpiperazine 215 g/kg, rat, oral N / A

.9 g/kg, rat, dermal

<u>Carcinogenicity</u> <u>Teratogenicity</u> <u>Reproductive toxicity</u> <u>Mutagenicity</u>
N/A
N/A
N/A
N/A

Exposure Limits: N / A

Effects of Overexposure:

Exposure may result in sensitization (skin). Prolonged or repeated exposure may cause skin irritation (chemical dermatitis) Animal studies, of chronic exposure, have shown increased tumor formation in liver, thyroid, and possible mammary glands through ingestion.

Primary Route(s) of Entry: Inhalation, Ingestion, skin contact, skin absorption, and eye contact.

Emergency and First Aid Procedures:

Excessive Inhalation: If affected by vapors, move person to fresh air. Apply artificial respiration to person who loses consciousness and call a doctor immediately.

Eye contact: Flush with copious amounts of water (preferably lukewarm) for at least 15 minutes holding eyelids open all the time. Refer individual to a physician or ophthalmologist for immediate follow up.

Skin contact: Thoroughly wash with Soap and water. If irritation persists see a doctor immediately.

Ingestion: If the person is conscious rinse out the mouth and give two glasses of water to drink and INDUCE VOMITING, call a doctor immediately. (Never give fluids to an unconscious person)

SECTION VI – REACTIVITY DATA

Stability: Stable

Hazardous Polymerization:

Hazardous polymerization may occur with high temperatures and or contact with isocyanates. Highly exothermic reactions may occur when mixed in large quantities with incompatible materials.

Conditions to Avoid:

For maximum product stability maintain a temperature range of 65° - 85°. Avoid temperatures below 40 degrees Fahrenheit. Avoid freezing conditions.

Incompatibility (Materials To Avoid):

Strong mineral acids, oxidizers, and isocyanates.

SECTION VII - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Dike and absorb spilled material with inert absorbent material such as sand, earth, and sawdust. Use rags to clean up small amounts of spilled material with detergent and water.

Waste Disposal Method:

Collect material contaminated absorbent and rags into a disposable container and dispose of in accordance to local, state, and federal regulations. Consult with your local hazardous waste regulations regarding landfill dumping. Incineration in accordance with applicable regulations is preferred.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

Respiratory Protection:

Wear approved organic vapor respirator when working in poorly ventilated areas

Ventilation:

General mechanical ventilation should be sufficient to when working with small amounts of material. When working with larger quantities the use of local exhaust is recommended.

Protective Gloves:

Use impermeable solvent resistant gloves to protect from skin contact.

Eye Protection:

Use safety goggles, chemical safety glasses and or face shields to protect eyes.

Other Protective Equipment:

Normal work clothing providing complete coverage of arms and legs is sufficient. Any clothing contaminated with product should be washed before reuse. Shoes should be resistant to solvent / chemical absorption. Leather material once contaminated cannot be decontaminated.

Hygienic Practices:

Wash hands after use; avoid contact with skin and clothing. Eye washes and safety showers in the workplace are recommended.

SECTION IX – SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling and Storing:

Keep container s closed when not in use. Do not store or handle near heat, flames and strong oxidants. Store in cool well ventilated area. Rotate stock by using older materials first. Inspect for leaks in all containers.

Other Precautions:

Do not store in freezing areas. Keep above 40 degrees Fahrenheit. Keep out of reach of children.

Disclaimer – The information contained herein is based on data considered accurate. However, no warranty, whether expressed or implied is made.