

**EMERGENCY
CONTACT:
CHEMTREC
1-800-424-9300**

**SURE-BOND™ URETHANE FAST-SET ADHESIVE PART A
MATERIAL SAFETY DATA SHEET**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: SURE-BOND™ URETHANE FAST SET
ADHESIVE (SB1000, SB1012)
Product Use: Adhesive for Hoof Repair Materials

Manufactured by:

Vettec, Inc.
600 E. Hueneme Road
Oxnard, CA 93033
Telephone: 805-499-1122

Distributed in USA by:

Kane Enterprises, Inc.
P. O. Box 500
Brandon, SD 57005
Telephone: 1-800-336-8577

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization

Hazardous Ingredients	%	CAS	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
Diphenylmethane diisocyanate (MDI)	40 - 70	101-68-8	>2000 mg/kg, rabbit, dermal >5000 mg/kg, rat, oral	490 mg/m3, rabbit, inhalation
Diphenylmethane-diisocyanate prepolymer	15 - 40	68424-09-9	N/A	N/A

3. HAZARDS IDENTIFICATION

Emergency Overview

Medium viscosity liquid, with low or no detectable odor. Weakly aromatic. Yellow color. Non-flammable liquid. Exposure may result in sensitization. Prolonged or repeated exposure may cause skin irritation (chemical dermatitis). Exposure above the TLV can cause irritation of the mucous membranes. Chest pain/or shortness of breath may occur in rare instances.

Effects of Overexposure - Eye Contact

Causes eye irritation.

Effects of Overexposure - Skin Contact

Exposure may result in sensitization. Prolonged or repeated exposure may cause skin irritation (chemical dermatitis).

Effects of Overexposure - Inhalation

Can cause irritation of the mucous membranes.

Effects of Overexposure - Ingestion

Harmful if swallowed.

Primary Route(s) of Entry

Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

4. FIRST AID MEASURES

Eye Contact

Flush with copious amounts of water, preferably lukewarm for at least 15 minutes, holding eyelids open all the time. Refer individual to physician or ophthalmologist for immediate follow-up.

Skin Contact

Remove contaminated clothing immediately. Wash skin promptly and thoroughly with soap and water. If a severe exposure occurs, remove clothing while showering in a safety shower. Seek medical attention if irritation or allergic reaction develops, or if gross exposure occurs.

Inhalation

Remove to fresh air immediately. Oxygen or artificial respiration may be administered by qualified personnel as needed. Obtain medical attention. Monitor for delayed (2-3 hr) asthmatic-type symptoms and consult physician if this occurs.

Ingestion

DO NOT INDUCE VOMITING. Rinse mouth with water and administer 1 - 2 glasses of milk or water. Never give fluids to an unconscious or convulsing victim. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

Flash Point

>280°F (138°C)
Cleveland Open Cup

Lower Flammable Limit (% by volume)

N/A

Upper Flammable Limit (% by volume)

N/A

Auto-Ignition Temperature (°C)

N/A

Hazardous Combustion Products

Oxides of nitrogen and carbon, traces of HCN, MDI vapors and aerosols.

Explosion Data

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

Sensitivity to Shock/Impact

None

Sensitivity to Static Discharge

None

Means of Extinction

Carbon dioxide, dry chemical, or foam is preferred. Water may be used as a blanket for fire extinguishment. If water is used, it should be used in very large quantities, and if possible contain water run-off.

6. REACTIVITY DATA

Chemical Stability

Stable

Incompatibility with Other Substances

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

Reactivity, and Under What Conditions

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

Hazardous Decomposition Products

By high heat and fire: oxides of nitrogen and carbon, traces of HCN, MDI vapors and aerosols.

7. TOXICOLOGICAL PROPERTIES

Route of Entry

Skin Contact

Skin Absorption

Eye Contact

Inhalation and Ingestion

Effects of Acute Exposure to Product

Exposure may result in sensitization. Prolonged or repeated exposure may cause skin irritation (chemical dermatitis).

Effects of Chronic Exposure to Product

Exposure above the TLV can cause irritation of the mucous membranes. Chest pain and/or shortness of breath may occur in rare instances.

Exposure Limits

TLV = 0.005 ppm TWA (MDI)

PEL = 0.02 ppm (MDI)

Irritancy of Product

Skin and eyes

Sensitization to Product

Skin

Carcinogenicity

No indication

Teratogenicity

N/A

Reproductive Toxicity

N/A

Mutagenicity

N/A

Synergistic Products

N/A

8. PREVENTATIVE MEASURES

Personal Protective Equipment To Be Used

Use product in a well-ventilated area with proper eye, skin and respiratory protection as specified below.

Gloves

Butyl rubber, nitrile rubber, or polyvinyl alcohol gloves are recommended.

Respirator

Use respirator approved by NIOSH/MSHA for organic vapors (TC-23C-860 or equivalent) when working with the product in poorly ventilated areas, or when large quantities of reacted product are involved. Use of this respirator is also recommended to avoid breathing the dust created from the grinding or sanding of the cured polymer.

Eye

Always wear eye goggles when dispensing manually or pneumatically. Full eye protection is also required when grinding or sanding cured polymer.

Footwear

Shoe material composition should be resistant to solvent/chemical absorption. Leather material once contaminated, cannot be decontaminated.

Clothing

Normal work clothing providing complete covering of arms and legs when working with small quantities. Any clothing contaminated with product should be washed thoroughly before reuse. When working with large quantities of product, complete coverage with an impermeable material is desirable.

Other

Wash hands after use. Avoid contact with skin and clothing.

Specific Engineering Controls To Be Used

General exhaust (dilution ventilation) is required. Local exhaust (capture and exhausting of air contaminants) is highly recommended. When dispensing product pneumatically, the proper shielding is to be affixed to dispenser.

Procedures To Be Followed In Case Of Leak Or Spill:

Absorb excess material in sawdust or other commercially available absorbent. Remove residue with detergent and water. In event of a large spill, persons without proper protective equipment should be excluded from area.

Waste Disposal

Waste or material contaminated with waste must be disposed of in accordance with federal, state and local regulations. Incineration in accordance with applicable regulations is preferred.

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ADHESIVE PART A
(SB1000, SB1012)

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Storage Requirements Store in a cool, dry place with adequate ventilation. For maximum product stability, maintain temperature range of 65° - 85° F.

9. SHIPPING INFORMATION

Special Shipping Information

D.O.T. Proper Chemical Name: Hoof Repair Material, Non Regulated

10. OTHER INFORMATION

HMIS RATING

Health: 2
Flammability: 1
Reactivity: 1
Personal Protective Index: M
(See Section 8)

Legend

N.A. - Not applicable
N.E. - Not established
N.D. - Not determined

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

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**SURE-BOND™ URETHANE FAST-SET ADHESIVE PART B
MATERIAL SAFETY DATA SHEET**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: SURE-BOND™ URETHANE FAST SET
ADHESIVE (SB1000, SB1012)
Product Use: Adhesive for Hoof Repair Materials

Manufactured by:

Polymer Engineering Corporation
1630 Fiske Place
Oxnard, California 93033
Telephone: 805-483-2043

Distributed in USA by:

Kane Enterprises, Inc.
P. O. Box 500
Brandon, SD 57005
Telephone: 1-800-336-8577

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization

Hazardous Ingredients	%	CAS	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingre- dient (Specify Species)
Tetrakis (2-hydroxypropyl) ethylenediamine	10 - 30	102-60-3	3900 mg/kg, rat, oral	N/A
Meta-xylylenediamine	1 - 5	1477-55-0	2000 mg/kg, rabbit, dermal 930 mg/kg, rat, oral	130 mg/L, golden orfe

3. PHYSICAL DATA

Physical State

Medium viscosity liquid

Odor and Appearance

Slight ammonia like odor. Color – light yellow color.

Odor Threshold (ppm)

N/A

Vapor Pressure (mmHg)

N/A

Vapor Density

>1 (air = 1)

Evaporation Rate

<1 (water = 1)

Boiling and Freezing Point (°C)

BP>390°F (199°C)

PH

N/A

Specific Gravity

1.0 - 1.1

Coeff. Water/Oil Dist.

N/A

4. FIRE AND EXPLOSION DATA

Flash Point

>275°F (135°C)

Cleveland Open Cup

Upper Flammable Limit (% by volume)

N/A

Lower Flammable Limit (% by volume)

N/A

Auto-Ignition Temperature (°C)

N/A

Hazardous Combustion Products

Hydrocarbon vapors and oxides of carbon and nitrogen plus undetermined aliphatic fragments.

Explosion Data

No hazards

Sensitivity to Shock/Impact

None

Sensitivity to Static Discharge

None

Flammability

No

Means of Extinction

Carbon dioxide, dry chemical, or foam is preferred. Water may be used as a blanket for fire extinguishment. If water is used, it should be used in very large quantities, and if possible contain water run-off.

5. REACTIVITY DATA

Chemical Stability

Stable

Incompatibility with Other Substances

Yes. Strong mineral acids, oxidizing agents and isocyanates.

Reactivity, and Under What Conditions

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

Hazardous Decomposition Products

By high heat and fire: hydrocarbon vapors and oxides of carbon and nitrogen plus undetermined aliphatic fragments.

6. TOXICOLOGICAL PROPERTIES

Route of Entry

Skin Contact
Skin Absorption
Eye Contact
Inhalation and Ingestion

Effects of Acute Exposure to Product

Prolonged or repeated exposure may cause skin irritation (chemical dermatitis)

Effects of Chronic Exposure to Product

Animal studies have shown increased tumor formation in liver, thyroids and possible mammary glands through ingestion.

Exposure Limits

N/A

Irritancy of Product

Skin and eyes

Sensitization to Product

Skin

Carcinogenicity

No indication

Teratogenicity

N/A

Reproductive Toxicity

N/A

Mutagenicity

N/A

Synergistic Products

N/A

7. PREVENTATIVE MEASURES

Personal Protective Equipment To Be Used

Use product in a well-ventilated area with proper eye, skin, and respiratory protection as specified below.

Gloves (Specify)

Butyl rubber, nitrile rubber, or polyvinyl alcohol gloves are recommended.

Respirator (Specify)

Use respirator approved by NIOSH/MSHA for organic vapors (TC-23C-860 or equivalent) when working with the product in poorly ventilated areas, or when large quantities of unreacted product are involved. Use of this respirator is also recommended to avoid breathing the dust created from the grinding or sanding of the cured polymer.

Eye (Specify)

Always wear eye goggles when dispensing manually or pneumatically. Full eye protection is also required when grinding or sanding cured polymer.

Footwear (Specify)

Shoe material composition should be resistant to solvent/chemical absorption. Leather material once contaminated, cannot be decontaminated.

Clothing (Specify)

Normal work clothing providing complete covering of arms and legs when working with small quantities. Any clothing contaminated with product should be washed thoroughly before reuse. When working with large

quantities of product, complete coverage with an impermeable material is desirable.

Other (Specify)

Wash hands after use. Avoid contact with skin and clothing.

Specific Engineering Controls To Be Used

General exhaust (dilution ventilation) is required. Local exhaust (capture and exhausting of air contaminants) is highly recommended. When dispensing product pneumatically, the proper shielding is to be affixed to dispenser.

Procedures To Be Followed in Case Of Leak Or Spill

Absorb excess material in sawdust or other commercially available absorbent. Remove residue with detergent and water. In event of a large spill, persons without proper protective equipment should be excluded from area.

Waste Disposal

Waste or material contaminated with waste must be disposed of in accordance with federal, state and local regulations. Incineration in accordance with applicable regulations is preferred.

Storage Requirements

Store in a cool, dry place with adequate ventilation. For maximum product stability maintain temperature range of 65° - 85°F.

8. FIRST AID MEASURES

Eye Contact

Flush with copious amounts of water, preferably lukewarm for at least 15 minutes holding eyelids open all the time. Refer individual to physician or ophthalmologist for immediate follow-up.

Skin Contact

Remove contaminated clothing immediately. Wash skin promptly and thoroughly with soap and water. If a severe exposure occurs, remove clothing while showering in a safety shower. Seek medical attention if irritation or allergic reaction develops, or if gross exposure occurs.

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Excessive Inhalation

Remove to fresh air immediately. Oxygen or artificial respiration may be administered by qualified personnel as needed. Obtain medical attention. Monitor for delayed (2-3 hr) asthmatic-type symptoms and consult physician if this occurs.

Ingestion

Administer two glasses of water and **INDUCE VOMITING**. Never give fluids to an unconscious or convulsing victim. Obtain medical attention immediately.

9. SHIPPING INFORMATION

Special Shipping Information

D.O.T. Proper chemical name: Hoof Repair Materials, Non-Regulated

10. OTHER INFORMATION

HMIS RATING

Health:	2
Flammability:	1
Reactivity:	1
Personal Protective Index:	M

(See Section 7)

Legend

N.A. - Not applicable
N.E. - Not established
N.D. - Not determined

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