



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product name	BST Urethanes
Product name(s) covered	A45200 - BST URETHANE L A45230 - BST URETHANE S/PK 16/30 G62130 - 67017-00 BST URETHANE G62140 - 67017-00 BST URETHANE G62340 - BST NO PIGMENT
MSDS name	BST Urethanes
CAS number	Mixture
Generic description	Polyurethane Wooding Floor Adhesive
Manufacturer	Bostik, Inc. 211 Boston Street Middleton , MA 01949 USA
24 hour emergency assistance	Telephone: 1-800-227-0332
General assistance	Telephone: 1-978-777-0100
MSDS assistance	Telephone: 1-414-607-1407

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous component(s)	CAS #	Percent
Stoddard solvent	8052-41-3	3 - 7
Methylene Diphenyl Isocyanate (MDI)	101-68-8	0.1 - 1
Methyl alcohol	67-56-1	< 0.1

3. HAZARDS IDENTIFICATION

Emergency overview	This product contains materials that on exposure could cause irritation and minor residual injury even if no treatment is provided. This product is stable under normal conditions but will react slightly with water to release some heat and carbon dioxide. The reaction is not violent.
Potential health effects	
Skin	Skin Contact: Skin contact may cause irritation. A component of this product is a potential skin sensitizer. Repeated skin contact may cause a persistent irritation or dermatitis.
Eyes	Eye Contact: May cause irritation with temporary redness with stinging and tearing.
Inhalation	Inhalation: Inhalation of hot mist may cause respiratory irritation. Prolonged or repeated exposure may cause asthmatic or other pulmonary responses.
Ingestion	Ingestion: Exposure is unlikely. This product can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Target organs	Skin. Eyes. Lungs.
Hazard statements	Methanol is formed during curing. Methanol may cause nausea, abdominal pain, vomiting, headache, dizziness, shortness of breathe, weakness, fatigue, leg cramps, restlessness, confusion, drunken behavior, visual disturbances, drowsiness, coma, and death. Visual effects include blurred vision, diplopia, changes in color perception, restriction of visual fields, complete blindness. Ingestion of moderate quantities of methanol produces metabolic acidosis. Onset of symptoms may be delayed up to 48 hours. OSHA has established a PEL of 200 ppm, 8 hour TWA. Provide ventilation adequate to control vapor exposure within inhalation guidelines when handling. This product contains Methylene Diphenyl Isocyanate (MDI) which is a potential skin sensitizer and has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity. Risk to your health depends on duration and concentration of exposure.

4. FIRST AID MEASURES

First aid

Skin	Remove contaminated clothing to prevent further skin exposure and dispose of properly. In situations involving considerable skin contact, place the contaminated person in a deluge shower for at least 15 minutes. For minor exposures, wash thoroughly with soap and clean water. Get medical attention if irritation persists.
Eye	Immediately flush with plenty of water for at least 15 minutes, holding eyelids open at all times. Get medical attention immediately. See Notes to Physician.
Inhalation	Remove to fresh air. Give artificial respiration if not breathing. If symptoms persist, get medical attention.
Ingestion	No harmful effect is anticipated. If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel. If victim is conscious and not convulsing give 1 or 2 glasses of water to dilute the chemical. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Notes to physician	Treat symptomatically and supportively. Contact Bostik to determine whether any additional information is available.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use dry chemical, carbon dioxide, or foam. Use water spray on large fires.
Dust explosion hazard	None Known
Sensitivity to mechanical impact	None Known
Sensitivity to static discharge	None Known
Unusual fire & explosion hazards	This product is classified as a Combustible Liquid. Containers may explode in a fire. Product may burn and produce toxic gases in a fire.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus.
Flash point	142 °F (61.1 °C)

6. ACCIDENTAL RELEASE MEASURES

Emergency action	Appropriate safety measures and protective equipment should be used. See Section 8.
Containment	Isolate spill area. Stop discharge if safe to do so. Stop material from contaminating soil or from entering sewers or water streams. Scrape up polyurethane and deposit into appropriate containers.

7. HANDLING & STORAGE

For Commercial Use Only - Not Packaged or Labeled for Home Use!

Handling	Avoid contact with skin and eyes. Wash thoroughly after handling. Use this product with adequate ventilation.
Storage	Store in a clean, dry area. Keep containers closed.
Empty container precaution	Attention! Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption, or where skin contact can occur.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls	Use local exhaust ventilation when vapors, mists, or dusts can be released in concentrations above the TLV. Local exhaust is preferred, but general ventilation may be acceptable to meet exposure limits.
Eye protection	Wear safety glasses with side shields.
Skin and body protection	Cover as much of exposed skin as possible. Wear protective clothing that provides protection against skin exposure. Wear chemical resistant gloves and clothing.
Respiratory protection	Avoid breathing vapor and/or mists. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator.
General	Eyewash fountains and emergency showers should be readily available. Use good industrial hygiene practices in handling this material.

Exposure limits

ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)

Methyl alcohol	67-56-1	<u>200 ppm TWA</u>
Methylene Diphenyl Isocyanate (MDI)	101-68-8	<u>0.005 ppm TWA</u>
Stoddard solvent	8052-41-3	<u>100 ppm TWA</u>

OSHA - Vacated PELs - Ceilings

Methylene Diphenyl Isocyanate (MDI)	101-68-8	<u>0.02 ppm Ceiling; 0.2 mg/m3 Ceiling</u>
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OSHA - Vacated PELs - TWAs

Methyl alcohol	67-56-1	<u>200 ppm TWA; 260 mg/m3 TWA</u>
Stoddard solvent	8052-41-3	<u>100 ppm TWA; 525 mg/m3 TWA</u>

9. PHYSICAL & CHEMICAL PROPERTIES

Boiling point	310 - 405 °F (154.4 - 207.2 °C)
Vapor pressure	2 mm HG
Vapor density	5
Solubility (H2O)	0 %
Target solids	93 %
pH	N/A
Density	1.508 g/cc
Odor	Solvent
Color	Amber
Physical state	Paste
Freeze protect	No
VOC (Volatile Organic Compounds)	86 g/l

10. STABILITY & REACTIVITY

Hazardous reactions/decomposition products	If product is burned carbon monoxide, carbon dioxide, oxides of nitrogen, amines, isocyanate-containing compounds and other unknown products may be produced.
Hazardous polymerization	Not likely to occur. However, curing of product releases carbon dioxide. If curing occurs inside a closed container, pressure buildup may result.
Conditions to avoid	Avoid contact with Strong Oxidizers, Strong Alkalis, Strong Acids, Alcohols, and Water.
Stability	Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

LD50

NIOSH - Selected LD50s and LC50s

Methyl alcohol	67-56-1	<u>Inhalation LC50 Rat: 64000 mg/kg/4H; Oral LD50 Rat: 5628 mg/kg; Oral LD50 Mouse: 7300 mg/kg; Dermal LD50 Rabbit: 15800 mg/kg</u>
Methylene Diphenyl Isocyanate (MDI)	101-68-8	<u>Oral LD50 Rat: 9200 mg/kg; Oral LD50 Mouse: 2200 mg/kg</u>

Carcinogenicity This product contains Methylene Diphenyl Isocyanate (MDI). MDI is not listed by the NTP, IARC or regulated by OSHA as a carcinogen. However, it has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity.

Sensitization to material May cause sensitization of susceptible persons by skin contact or by inhalation of aerosol or dust.

12. ECOLOGICAL INFORMATION

VOC (Volatile Organic Compounds)	86 g/l
Ecotoxicological information	Organic solvents produce slight to moderate toxicity to aquatic life. Insufficient data exists to evaluate the effect on plants, birds or land animals.

13. DISPOSAL CONSIDERATIONS

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

Waste disposal

This product is not known to be regulated under RCRA regulations but contains SARA regulated substances. Disposal of unused portions of this product and process waste containing this product should be done only after a careful evaluation and in compliance with all federal, local and state laws.

14. TRANSPORT INFORMATION

DOT

This product is not regulated for transport.

IATA

This product is not regulated for transport.

IMDG

This product is not regulated for transport.

15. REGULATORY INFORMATION

This MSDS is prepared and distributed pursuant to the Federal Hazard Communication Standard, 29 CFR 1910.1200.

Federal regulations

All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Methyl alcohol 67-56-1 5000 lb final RQ; 2270 kg final RQ
Methylene Diphenyl Isocyanate (MDI) 101-68-8 5000 lb final RQ; 2270 kg final RQ

CERCLA/SARA - Section 313 - Emission Reporting

Methyl alcohol 67-56-1 1.0 % de minimis concentration
Methylene Diphenyl Isocyanate (MDI) 101-68-8 1.0 % de minimis concentration (Listed under 'Diisocyanates')

TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification

Chlorobenzene 108-90-7 Section 4

State regulations

If this product contains any ingredients listed under California Proposition 65, they will be noted below:

International regulations

All components are included on the Canadian Domestic Substances List (DSL).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and contains all the information required by the Controlled Products Regulations.

HMIS Ratings

Health: 2
Flammability: 2
Physical hazard: 0
Personal protection: X

SARA 311/312 HAZARD CATEGORIES

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

WHMIS status

Controlled

WHMIS labeling



WHMIS classification

D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

16. OTHER INFORMATION

Disclaimer

The data in this MSDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Responsibility for proper precautions and safe use of the product lies with the user. All data in this MSDS is typical of the product as a whole, and does not represent any individual lot or batch, therefore, Bostik, Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.

Issue date

05/10/2005

Prepared by

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