



MATERIAL SAFETY DATA SHEET

Revision 2008-07-28

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product name Mulco ADH 99
Product name(s) covered A48817 - MULCO ADH 99 300ML 12/10.1
A48818 - MULCO ADH 99 800 ML 12/27.0
MSDS name Mulco ADH 99 - Various Package Types
CAS number Mixture
Product use Construction Adhesive
Generic description Polyurethane Sealant/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

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: Vapors and mists from this product are respiratory irritants. Repeated inhalation may result in lung damage. Symptoms may include irritation to the eyes, nose, throat, and lungs, possibly combined with dryness of the throat, tightness of the chest, and difficulty in breathing.

Ingestion Ingestion: Exposure is unlikely. This product can cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Target organs The lungs may be targeted and damaged by components of this product. Skin, Eyes.

4. FIRST AID MEASURES

First aid

Skin For skin contact, wash immediately with soap and water. If irritation persists, get medical attention. See Notes to Physician.

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. Get medical attention if symptoms develop. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours.

Ingestion No harmful effect is anticipated. If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Notes to physician A component of this product is a potential skin sensitizer. Treat symptomatically as for contact dermatitis. Persons with hypersensitivities to isocyanates should be removed from exposure to any isocyanates. May aggravate existing heart conditions, particularly those with abnormal heart rhythms.

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
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus.
Flash point	135 °F (57.2 °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 with adequate ventilation.
Eye protection	Wear safety glasses with side shields.
Skin and body protection	Wear appropriate clothing to minimize skin contact with this product.
Respiratory protection	Not normally needed.
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)

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

Stoddard solvent	8052-41-3	<u>100 ppm TWA; 525 mg/m3 TWA</u>
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9. PHYSICAL & CHEMICAL PROPERTIES

Solubility (H2O)	0 %
Target solids	93.1 %
pH	N/A
Density	1.777 g/cc
Odor	Slight
Color	Olive
Physical state	Paste
Freeze protect	No
VOC (Volatile Organic Compounds)	105 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.
Conditions to avoid	Avoid contact with Strong Oxidizers and Strong Acids.
Stability	Stable under normal conditions.

11. TOXICOLOGICAL INFORMATION

LD50

Toxicology Data - Selected LD50s and LD50s

Methylene Diphenyl Isocyanate (MDI) 101-68-8 Oral LD50 Rat: 9200 mg/kg

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.

12. ECOLOGICAL INFORMATION

VOC (Volatile Organic Compounds)	105 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.

CECLSA/SARA - Hazardous Substances and their Reportable Quantities

Methylene Diphenyl Isocyanate (MDI) 101-68-8 5000 lb final RQ; 2270 kg final RQ

CECLSA/SARA - Section 313 - Emission Reporting

Methylene Diphenyl Isocyanate (MDI) 101-68-8 1.0 % de minimis concentration (Listed under Chemical Category N120, 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).

HMIS Ratings

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.

Health: 1
Flammability: 2
Physical hazard: 0
Personal protection: X

SARA 311/312 HAZARD CATEGORIES

Immediate Hazard - Yes
Delayed Hazard - No
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.

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Prepared by

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Supersedes

06/08/2005