

Material: MTA500 MightyTough Duct Liner Adhesive

1 IDENTIFICATION

1.1 Identification of the substance or preparation:

Commercial product name: MTA500 - CLEAR (Water-Based Adhesive)

Use of substance / preparation: Industrial/Residential Adhesive for HVAC System, bonding fibrous duct liner insulation to galvanized duct work. It is also designed for use in sealing cut edges of fiberglass insulation, bonding jacket or pipe insulation and bonding multiple layers of fiberglass or urethane insulation board. All other areas of application to be agreed with the Application Engineering/ Technical Marketing Department of the manufacturer.

1.2 Company/undertaking identification:

Manufacturer/distributor:

Hercules Industries 1310 West Evans Avenue Denver, CO 80223 USA

Emergency telephone no. (24h): 800-356-5350 Internet address: www.herculesindustries.com

This SDS was prepared by the Technical and Safety Dept. of Hercules Industries

Issue Date: 11/01/11 Revised Date: 07/01/15 Supersedes: Any MSDS or SDS on this product

2 HAZARD(S) IDENTIFICATION

2.1 Hazards classifications HMIS® rating (product as packaged): Health: 1 Fire: 0 Reactivity: 0 PPE: B



Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association.

(HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.)

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above "de minims" level are.... None

CALIFORNIA PROP 65 substances listed by the State of California under the "Safe Drinking Water and Toxic Enforcement Act of 1986".

No such substances are present in reportable amounts for occupational exposure as per OSHA's approval of the California Hazard Communication Standard, Federal Register, page 31159 ff, 6 June 1997.

2.2 Emergency overview and potential hazards

This material is not hazardous under OSHA criteria. This material is not hazardous under WHMIS criteria.

Physical Hazards:

No known physical hazards.

Acute health effects Route of entry or possible contact:

Eyes, skin, inhalation, ingestion.

Eve contact:

May cause slight eye discomfort or irritation.

Skin contact:

Prolonged or repeated contact may cause skin dryness or sensitization.

Inhalation:

No acute toxic respiratory tract effects are expected.

Ingestion:

Ingestion is not expected in industrial use.

2.3 Further information: Chronic health effects:

Contains chemical(s) present at < 0.1% which may cause: skin sensitization.

Medical conditions which may be aggravated by exposure:

Not established.

Carcinogens/Reproductive toxins:

This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels. There are no carcinogenic ingredients present at or over 0.1% in this material. See Section 11 for Toxicological Information, if any







3 COMPOSITION / INFORMATION ON INGREDIENTS PROPRIETARY

3.1 Chemical characterization (preparation):

Compounded Vinyl Acetate based copolymers and additives

3.2 Information on ingredients:

Material: MTA500

This material does not contain any hazardous substances at or above OSHA and WHMIS reportable levels.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in Section 2 are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

4 FIRST-AID MEASURES

- **4.1 General information:** Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.
- 4.2 After inhalation:
 - No special measures required.
- 4.3 After contact with the skin:
 - If contact with skin, wash skin with plenty of water or with water and soap.
- **4.4 After contact with the eyes:** If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.
- **4.5 After swallowing:** For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention if symptoms occur. Show label if possible.

5 FIRE-FIGHTING MEASURES

5.1 Flammable properties: Method

Flash point..... not applicable

Boiling point / boiling range...... approx. 100 °C (212 °F) at 1013 hPa

Lower explosion limit (LEL)..... not applicable

Ignition temperature not applicable

- **5.2 Fire and explosion hazards:** Material does not burn. Dried up material is combustible. This material does not present any unusual fire or explosion hazards.
- **Recommended extinguishing media:** Use extinguishing measures appropriate to the source of fire. Water may be used to cool tanks and structures adjacent to the fire.
- 5.4 Unsuitable extinguishing media:

Not applicable

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

At low oxygen level: acetic acid.

5.6 Fire fighting procedures: Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

6.1 Precautions:

Wear personal protection equipment (see section 8). If material is released indicate risk of slipping. HAZWOPER PPE Level: D

6.2 Containment:

Prevent material from entering sewers or surface waters. Contain any fluid that runs out using suitable material (e.g. earth). Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up:

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations.



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7 HANDLING AND STORAGE

7.0 General information:

Avoid exposure by technical measures or personal protective equipment.

7.1 Handling Precautions for safe handling:

Spilled substance increases risk of slipping.

Precautions against fire and explosion:

No special precautions against fire and explosion required.

7.2 Storage Conditions for storage rooms and vessels: Protect against frost.

Advice for storage of incompatible materials: Not applicable.

Further information for storage: Not applicable.

Minimum temperature allowed during storage and transportation: 0 °C (32 °F)

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Engineering controls Ventilation:

Use with adequate ventilation.

Local exhaust:

No special ventilation required.

- 8.2 Associate substances with specific control parameters such as limit values Maximum airborne concentrations at the workplace:

 None known
- 8.3 Personal protection equipment (PPE) Respiratory protection: Respiratory protection is not normally required. Hand protection: Recommendation: Any liquid-tight rubber or vinyl gloves. Eye protection: Safety glasses with side shields or chemical safety goggles. Other protective clothing or equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.





8.4 General hygiene and protection measures: Avoid contact with eyes, skin and clothing. Do not eat or drink when handling. Wash thoroughly after handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

| 9.1 | Appearance |
|-----|------------|
| 7.1 | Appearance |

Physical state/form.....liquid
Color......White – Wet, Clear - Dry

Odor......slight / mild

9.2 Safety parameters Method

Melting point / melting range...... approx. 0.00 °C (32 °F)

Boiling point / boiling range....... approx. 100 °C (212 °F) at 1013 hPa

Water solubility / miscibility...... dilutable, moderately soluble

Viscosity (dynamic).....> 2,000 cP



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10 STABILITY AND REACTIVITY

- 10.1 General information: If stored and handled in accordance with standard industrial practices no hazardous reactions are known.
- **10.2 Conditions to avoid:** None known.
- 10.3 Materials to avoid: None known.
- **10.4 Hazardous decomposition products:** If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known. At increased temperature: acetic acid.
- 10.5 Further information: Hazardous polymerization cannot occur.

11 TOXICOLOGICAL INFORMATION

11.1 General information:

Toxicological testing has been conducted with similar product(s).

11.2 Toxicological data: Acute toxicity (LD50/LC50-values relevant to classification):

Primary irritation:

Experience with man: During manufacture and use: No information on damage to health.

12 ECOLOGICAL INFORMATION

12.1 Information on elimination (persistence and degradability) Biodegradation / further information:

Not readily biodegradable.

Further information:

Polymer component: Elimination by adsorption to activated sludge. Separation by flocculation is possible.

12.2 Behavior in environmental compartments

Mobility

Further information: No adverse effects expected.

12.3 Ecotoxicological effects:

No expected damaging effects to aquatic organisms.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

According to current knowledge adverse effects on water purification plants are not expected.

12.4 Additional information

Other harmful effects

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General information:

Prevent material from entering surface waters and soil. Only introduce into water purification plants in diluted state. No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable. The ecotoxicological results provided were obtained from tests with similar products.

13 DISPOSAL CONSIDERATIONS

- **13.1 Product disposal Recommendation:** Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations. After chemical deflocculation: Can be stored with domestic waste. Observe local/state/federal regulations.
- **Packaging disposal Recommendation:** Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. **Recommended cleaning agent:** water

14 TRANSPORT INFORMATION

14.1 US DOT & CANADA TDG SURFACE

14.2 Transport by sea IMDG-Code

14.3 Air transport ICAO-TI/IATA-DGR

Valuation.....: Not regulated for transport



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15 REGULATORY INFORMATION

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimums levels.

HAPS (Hazardous Air Pollutants):

108-05-4 Vinyl acetate

15.2 U.S. State regulations

California Proposition 65 Carcinogens:

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

This material does not contain any chemicals known to the state of California to cause reproductive effects.

Massachusetts Substance List:

This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

This material contains no listed components.

15.3 Canadian regulations

16 OTHER INFORMATION

16.1 Additional information:

This Safety Data Sheet (SDS) complies with HCS/HAZCom 2012 format and meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

16.2 Glossary of Terms:

ACGIH -American Conference of Governmental ppm -Parts per Million Industrial Hygienists SARA -Superfund Amendments and Reauthorization Act DOT -Department of Transportation STEL -Short Term Exposure Limit hPa -Hectopascals TSCA -Toxic Substances Control Act mPa*s -Milli Pascal-Seconds TWA -Time Weighted Average OSHA -Occupational Safety and Health Administration WHMIS -Canadian Workplace Hazardous Materials PEL -Permissible Exposure Limit Identification System

Pressure: 1 hPa * 0.75 = 1 mm Hg = 1 Torr; 1 bar = 1000 hPa Viscosity: 1 mPa*s = 1 Centipoise (cP)