

MSDS 10 Minute Concrete Mender
Roadware Incorporated 651-457-6122
381 Bridgepoint Drive
South St. Paul, MN 55075-1517

Component A Page 1 of 2

Material Safety Data Sheet (MSDS)
Health: 2, Fire: 2, Reactivity: 1, Personal Protection: H
Hazard Rating: Least - 0, Slight - 1, Moderate - 2, High - 3, Extreme - 4.

Product: ROADWARE (Sylcrete) 10 Minute Concrete Mender (Component A)

Section 1 Manufacturer's Name:

Roadware Incorporated
381 Bridgepoint Drive
South Saint Paul, MN 55075
651-457-6122

24-HOUR EMERGENCY TELEPHONE NUMBER: **CHEM-TEL 800-255-3924**. USE ONLY IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT INVOLVING ROADWARE PRODUCTS.

WHMIS Classification: D2B; TDG Shipping Information: Non-regulated Material US DOT CA-9501002; Non-regulated by Road or Rail as per permit No. SU 4652

Date Prepared: November 1, 2004

Section 2 Hazardous Ingredients/SARA III Information

Haz. Cmpts.	CAS #	OSHA PEL	ACGIH MFG	% W
Polymeric MDI Polymethylene	9016-87-9	0.02 ppm	0.02 ppm	70-75
Aromatic Polyester Distillate	6846-50-0	N.E.	N.E	25-30

Substances listed in the Ingredients Section are those identified as being present in concentration of 1% or greater, or 0.1% if the substance is on the list of potential carcinogens cited in OSHA Hazard Communication Standard, 29 CFR 1910.1200 (1).

Section 3 Physical/Chemical Characteristics

Boiling Pt. >300° F
Vapor Density: N/A
Solubility In Water: reacts with water.
Specific Gravity (H₂O=1) : 1.1
Evaporation Rate: N/A
Appearance And Odor: Thin liquid, mild aromatic.

Section 4 Fire And Explosion Hazard Data

Flash Point: 145° F Method Used: PMCC
Flammable Limits In Air By Volume - Lower: N/A Upper: N/A
Extinguishing Media: Foam, CO₂, Dry Chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus in positive pressure mode with face piece. Boots, gloves (neoprene), goggles, and protective clothing are also required.
Unusual Fire And Explosion Hazard: Closed containers may rupture due to very high temperature. Toxic gasses are generated during a fire. Hazardous water contamination may cause carbon dioxide and rupture the container due to pressure buildup.

Section 5 Reactivity Data

Stability: stable

Conditions To Avoid: Heat, open flame and sparks.

Incompatibility (materials to avoid): Strong oxidizing agent, water, alcohol.

Hazardous Decomposition Or By Products: Carbon dioxide, carbon monoxide, nitrogen oxide. Trace amount of hydrogen cyanide.

Hazardous Polymerization: Will not occur.

Section 6 Health Hazard Data

This material, when used in conjunction with 10 Minute Concrete Mender Side B, will react within the mixing process in seconds. Any exposure to individual components will be minimal due to the polymer locking reaction between Part A and part B. Material in pre-packaged cartridges is self mixing and is applied directly to the repair area in a semi-reacted state.

Exposure under these conditions is generally below measurable amounts. When pot mixing these materials, adequate ventilation should be provided. Do not pot-mix in an enclosed area. A slight odor is generated within the reaction process. This is caused by a trace amount of naphthalene within the materials. Ventilate enclosed areas to dissipate.

Inhalation Health Risks And Symptoms Of Exposure: High concentrations may irritate respiratory tract, Inhalation of mists and vapors may cause dry throat, cough, dizziness, headache, nausea, unconsciousness and other central nervous systems effects. MDI can induce respiratory sensitization with asthma-like symptoms.

Skin And Eye Contact Health Risks And Symptoms Of Exposure: Repeated and prolonged contact can cause skin irritation.

Skin Absorption Health Risks And Symptoms Of Exposure: Repeated skin contact can cause reddening, swelling and blistering.

Ingestion Health Risks And Symptoms Of Exposure: Low level of acute oral toxicity can cause nausea, vomiting, diarrhea, headache and irritation and/or burns to the mouth.

Carcinogenicity: NTP? NO, IARC Monographs? NO, OSHA Regulated? NO

Medical Conditions Generally Aggravated By Exposure: Eye and Skin irritation, asthma like conditions.

Emergency And First Air Procedures: Eye contact - Flush eye with water for at least 15 minutes. Get medical attention promptly. Inhalation - Remove person to fresh air, if breathing is difficult administer oxygen. Get medical attention immediately. Skin contact - Wipe off and wash thoroughly contacted area with soap and water. Ingestion - Do not induce vomiting. Consult physician immediately.

Section 7 Precautions For Safe Handling and Use

Steps To Be Taken In Case Materials Is Released Or Spilled: Eliminate ignition sources like heat, open flame and sparks, ventilate area of spill and dike area. Cover the spill with inert absorbent and shovel into disposable containers.

Waste Disposal Method: Shovel into container, dispose of as federal, state and local environmental law permits.

Precautions To Be Taken In Handling And Storing: Store in cool dry place, away from heat, open flame, sparks and water.

Other Precautions: Individuals with respiratory problems to Isocyanates must not be exposed to vapors or spray mist containing Isocyanates.

Section 8 Control Measures

Respiratory Protection: Provide adequate ventilation to keep the airborne concentration of diisocyanate below TLV limit. For concentration above TLV limit use of a positive pressure self-contained breathing apparatus (SCBA) or NIOSH/MSHA approved positive pressure supplied air respirator with a full face piece and escape (SCBA) required.

Ventilation: Local exhaust recommended.

Eye Protection: chemical safety goggles.

Other Protective Clothing Or Equipment: Laboratory coats or aprons to avoid skin contact. Accessible to safety shower and eye wash stations.

Work/Hygiene Practices: Avoid unnecessary exposure to vapors and mists. Use protective equipment to minimize skin contact.

Section 9 Disclaimer

The data set forth in this sheet is based on information provided by the suppliers of raw materials and chemicals used in the manufacture of the aforementioned product. Roadware Incorporated makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.

MSDS 10 Minute Concrete Mender
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Component B Page 1 of 2

Material Safety Data Sheet

Health: 1, Fire: 2, Reactivity: 0, Personal Protection: H
Hazard Rating: Least - 0, Slight - 1, Moderate - 2, High - 3, Extreme - 4.

Product Name: ROADWARE (Sylcrete) 10 Minute Concrete Mender (Component B)

Section 1 Manufacturer's Name:

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Date Prepared: November 1, 2004

Section 2 Hazardous Ingredients/SARA III Information

Haz. Cmpts.	CAS #	OSHA PEL	ACGIH	% W
Polyether Polyol	25214-63-5			35-45
Glycol	25265-71-8			5-10
Aromatic Polyester Distillate	6846-50-0			60-70

Substances listed in the Ingredients Section are those identified as being present in concentration of 1% or greater, or 0.1% if the substance is on the list of potential carcinogens cited in OSHA Hazard Communication Standard, 29 CFR 1910.1200 (1).

Section 3 Physical/Chemical Characteristics

Boiling Pt. 320° F
Vapor Density: Not Determined.
Vapor Pressure: (mmHg @ 68°F): nil
Solubility In Water: N/A
Specific Gravity (H₂O=1) : 0.943
Evaporation Rate: Slower than ether.
Appearance And Odor: Thin liquid, mild odor.

Section 4 Fire And Explosion Hazard Data

Flash Point: 158° F Method Used: ASTM D-92 C.O.C.
Flammable Limits In Air By Volume: Lower: N/A Upper: N/A
Extinguishing Media: Foam, CO₂, Dry Chemical.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus in positive pressure mode with face piece. Boots, gloves (neoprene), goggles, and protective clothing are also required.
Unusual Fire And Explosion Hazard: Closed containers may rupture due to very high temperature.

Section 5 Reactivity Data

Stability: stable

Conditions To Avoid: Heat, open flame and sparks.

Incompatibility (materials to avoid): Isocyanates and strong oxidizing agent.

Hazardous Decomposition Or By Products: Carbon dioxide, carbon monoxide.

Hazardous Polymerization: Will not occur.

Section 6 Health Hazard Data:

This material, when used in conjunction with 10 Minute Concrete Mender Side A, will react within the mixing process in seconds. Any exposure to individual components will be minimal due to the polymer locking reaction between part A and part B. Material in pre-packaged cartridges is self-mixing and is applied directly to the repair area in a semi-reacted state.

Exposure under these conditions is generally below measurable amounts. When pot mixing these materials, adequate ventilation should be provided. Do not pot-mix in an enclosed area. A slight odor is generated within the reaction process.

This is caused by a trace amount of naphthalene within the materials. Ventilate enclosed areas to dissipate.

Inhalation Health Risks And Symptoms Of Exposure: High concentration may irritate respiration tract, dizziness, headache, unconsciousness and other central nervous system effects.

Skin And Eye Contact Health Risks And Symptoms Of Exposure: Repeated and prolonged contact can cause skin irritation.

Skin Absorption Health Risks And Symptoms Of Exposure: Repeated skin contact can cause reddening, swelling and blistering.

Ingestion Health Risks And Symptoms Of Exposure: Slightly toxic by ingestion. Ingestion may result in vomiting, irritation to mouth.

Carcinogenicity: NTP? NO, IARC Monographs? NO, OSHA Regulated? NO

Medical Conditions Generally Aggravated By Exposure: Eye and Skin Sensitizer.

Emergency And First Air Procedures: Eye Contact - Flush eye with water for at least 15 minutes. Get medical attention promptly. Inhalation - Remove person to fresh air, if breathing is difficult, administer oxygen. Get medical attention immediately. Skin contact - Wipe off and wash thoroughly contacted area with soap and water. Ingestion - Do not induce vomiting. Consult physician immediately.

Section 7 Precautions For Safe Handling And Use

Steps To Be Taken In Case Materials Is Released Or Spilled: Eliminate ignition sources like heat, open flame and sparks.

Ventilate area of spill and dike area. Cover the spill with inert absorbent and shovel into disposable containers.

Waste Disposal Method: Shovel into container, dispose of as federal, state and local environmental law permits.

Precautions To Be Taken In Handling And Storing: Store in cool dry place, away from heat, open flame, sparks. Use proper grounding procedure.

Other Precautions: Good personal hygiene practices are recommended.

Section 8 Control Measures

Respiratory Protection: Provide adequate ventilation to keep the airborne concentration of diisocyanate below TLV limit. (SCBA) or NIOSH/MSHA approved respirator with organic cartridge recommended for acid/organic vapor when airborne exposure is excessive.

Ventilation: Local exhaust recommended.

Eye Protection: Chemical safety goggles.

Other Protective Clothing or Equipment: Laboratory coats or aprons to avoid skin contact. Accessible to safety shower and eye wash stations.

Work/Hygiene Practices: Avoid unnecessary exposure to vapors and mists. Use protective equipment to minimize skin contact.

Section 9 Disclaimer

The data set forth in this sheet is based on information provided by the suppliers of raw materials and chemicals used in the manufacture of the aforementioned product. Roadware Incorporated makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereof.