

**W. R. GRACE**  
MATERIAL SAFETY DATA SHEET

Product Name: Daracem ML500  
MSDS ID Number: D-05671

MSDS Date: 01/19/2006

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Daracem ML500  
**MSDS Number:** D-05671  
**Cancelled MSDS Number:** D-05419  
**MSDS Date:** 01/10/2005  
**Chemical Family Name:** Melamine and Naphthalenesulfonate Formaldehyde Copolymers in Aqueous Solution  
**Product Use:** Concrete Admixture  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):**

**Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
Formaldehyde-naphthalenesulfonic acid polymer sodium salt	009084-06-4	1-10
Naphthalenesulfonic acid, polymer, potassium	009069-79-8	1-10
Sodium sulfate (solution)	007757-82-6	1-10
Sulfurous acid, monosodium salt, polymer	064787-97-9	10-25

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**  
Causes eye irritation.  
Causes respiratory tract irritation.

**HMIS Rating:**

Health: 1  
Flammability: 1  
Reactivity: 0  
Personal Protective Equipment: B (See Section 8)

**Potential Health Effects:**

**Inhalation:**  
Causes respiratory tract irritation.  
Prolonged inhalation may cause sensitization.  
Tightness of chest, hypersensitive individuals may experience allergic respiratory reaction, wheezing and If prolonged exposure to vapor or mist occurs, effects maybe more severe resulting in coughing and breathing difficulties.

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**Eye Contact:**

Eye contact causes irritation.

**Skin Contact:**

Acute skin contact is not expected to result in adverse effects.

Prolonged skin contact can result in irritation causing redness and itching.

Hypersensitive individuals may develop an allergic reaction resulting in dermatitis, rash or hives.

**Skin Absorption:**

Not expected to be harmful if absorbed through the skin.

**Ingestion:**

Oral toxicity is believed to be low.

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**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:**

Wash with soap and water.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

**Eye Contact:**

Flush eyes with water for at least 15 minutes while holding eyelids open.

If discomfort or irritation persists, consult a physician.

**Ingestion:**

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

**Inhalation:**

If symptoms develop, get fresh air. If symptoms persist, consult a physician.

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**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

<b>Flash Point:</b>	Not Determined
<b>Flash Point Method:</b>	Aqueous System
<b>Lower Explosion Limit:</b>	Not Available
<b>Upper Explosion Limit:</b>	Not Available
<b>Auto-Ignition Temperature:</b>	Not Available

**NFPA Rating:**

<b>Health:</b>	1
<b>Flammability:</b>	1
<b>Reactivity:</b>	0

**Extinguishing Media:** In case of fire, use water spray, dry chemical, Carbon dioxide or foam.

**Special Fire Fighting Procedures:**

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Water may be used to cool containers to prevent pressure build-up and possible auto-ignition or explosion. Avoid breathing hazardous vapors or products of combustion, keep upwind. Isolate area and keep unnecessary people away. Prevent run-off from fire control or dilution from entering streams or drinking water supplies.

No special procedures specific to this product.

**Unusual Fire and Explosion Hazards:**

None.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:**

Use proper personal protective equipment. Do not flush to sewer or allow to enter waterways. Keep unnecessary people away. Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container. For large spills, dike area and pump waste material into closed containers for disposal or reclamation.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:**

Avoid contact with eyes, skin and clothing.  
Do not take internally.  
Practice good personal hygiene to avoid ingestion.  
Use only with adequate ventilation.  
Wash clothing before reuse.  
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Formaldehyde-naphthalenesulfonic acid polymer sodium salt	-	-	-	-	-	-	-
Naphthalenesulfonic acid, polymer with formaldehyde, potassium	-	-	-	-	-	-	-
Sodium sulfate (solution)	-	-	-	-	-	-	-
Sulfurous acid, monosodium salt, polymer	-	-	-	-	-	-	-

\*Contains formaldehyde below 0.1% threshold. Product is capable of releasing formaldehyde under certain conditions. Exposure during typical application is expected to be insignificant. Exposure to formaldehyde vapor is a potential concern if product is applied under confined space conditions. Consult appropriate exposure guidelines for formaldehyde. (OSHA: 0.75 ppm-TWA, 2.0 ppm - STEL, ACGIH 0.3 ppm Ceiling)

**EXPOSURE GUIDELINES (CANADA)**

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Not generally required.

**Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection is not normally required. However, a chemical cartridge respirator with organic vapor cartridge and a prefilter for dusts/mists is required at or above the applicable exposure limits (Consult above Exposure Guidelines). If no limits exist, use an approved respirator whenever a vapor or mist is generated or if respiratory irritation occurs. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

A NIOSH approved respirator for Formaldehyde vapor is required whenever exposures exceed regulatory limits. For additional information, refer to US OSHA Regulations 29 CFR 1910.° 134.

**Skin Protection:** Rubber or other impervious gloves should be worn to prevent skin contact.

**Eye Protection:** At minimum, safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

**Work/Hygienic Practices:** Use good personal hygiene practices.

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None beyond those noted above.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Clear dark brown liquid with slight mothball (naphthalene) odor.
<b>Odor Threshold: (ppm)</b>	0.08 ppm (as Naphthalene)
<b>pH:</b>	7.0 - 10.0
<b>Vapor Pressure: (Mm Hg)</b>	~ = Water
<b>Vapor Density: (Air = 1)</b>	~ = Water
<b>Solubility In Water:</b>	Complete
<b>Specific Gravity: (Water = 1)</b>	1.1 - 1.2
<b>Evaporation Rate: (Butyl Acetate = 1)</b>	Unknown
<b>Boiling Point:</b>	~ = Water
<b>Viscosity:</b>	Unknown
<b>Bulk Density: (Pounds/Cubic Foot)(Pcf)</b>	Not Applicable
<b>% Volatiles (gr/L): (70°F) (21°C)</b>	~55% (As Water)

**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Conditions To Avoid:</b>	Oxidizing materials.
<b>Hazardous Polymerization:</b>	Will not polymerize.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide, Carbon monoxide, Sulfur oxides and Ammonia.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Ingredient(No data unless listed.)**                      **CAS Number**                      **LD50 and LC50**

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Formaldehyde-naphthalenesulfonic acid polymer sodium salt	No	No	No	No	No	No
Naphthalenesulfonic acid, polymer with formaldehyde, potassium	No	No	No	No	No	No
Sodium sulfate (solution)	No	No	No	No	No	No
Sulfurous acid, monosodium salt, polymer	No	No	No	No	No	No

\*Contains formaldehyde below 0.1% threshold. Product is capable of releasing formaldehyde under certain conditions. Exposures during typical applications are expected to be insignificant. Exposure to formaldehyde vapor is a potential concern if product is applied under confined space conditions. NTP: Suspect Carcinogen. IARC: Group 1. OSHA: Potential.

<b>Mutagenicity:</b>	Not applicable.
<b>Teratogenicity:</b>	Not applicable.
<b>Reproductive Toxicity:</b>	Not applicable.

**SECTION 12 - ECOLOGICAL INFORMATION**

<b>Environmental Fate:</b>	No data available for product.
<b>Ecotoxicity:</b>	No data available for product.

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**Massachusetts Hazardous Substance List(Identification threshold 0.0001%(1ppm)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**New Jersey Hazardous Substance List(Identification threshold (0.1%)):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**Pennsylvania Hazardous Substance List(Identification threshold 0.01%):**

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
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**CHEMICAL INVENTORY STATUS:**

All chemicals in this product are listed or exempt from listing in the following countries:

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	No	Yes	No	Yes	Yes

**SECTION 16 - OTHER INFORMATION**

**Non-Hazardous Ingredient Disclosure:**

<u>Chemical Name</u>	<u>CAS Number</u>
Water	007732-18-5

**Prepared by:** EH&S Department  
**Approved by:** EH&S Department  
**Approved Date:** 01/19/2006

**Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."