

W. R. GRACE
MATERIAL SAFETY DATA SHEET

Product Name: Efflorescence Controlling Admixtures
MSDS ID Number: MP-90305

MSDS Date: 10/13/04

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Efflorescence Controlling Admixtures
MSDS Number: MP-90305
Cancelled MSDS Number: MP-90296
MSDS Date: 10/13/04
Chemical Family Name: Masonry Dispersion
Product Use: Masonry Efflorescence Control Water Repellent and Strength Enhancer
Chemical Formula: Mixture-NA
CAS # (Chemical Abstracts Service Number): Mixture-NA

Manufactured by:

W.R.Grace & Co.-Conn. 62 Whittemore Avenue Cambridge, MA 02140	Grace Canada, Inc. 294 Clements Road West Ajax, Ontario L1S 3C6
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In Case of Emergency Call:

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

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS#	Percent (max)
4-Nonylphenol, branched, ethoxylated	127087-87-0	1-10
ACRYLIC POLYMER	NJ801416014	1-10
Calcium stearate	001592-23-0	25-50
Formaldehyde	000050-00-0	< 1
Proprietary Additives	NJ801415105	1-10
Sodium dodecylbenzenesulfonate	025155-30-0	1-10
Triethanolamine	000102-71-6	1-10

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Caution!

Causes eye irritation.
Causes skin irritation.
May be harmful if ingested.
Causes digestive tract irritation if ingested.
May cause liver and kidney damage.
Possible cancer hazard.

HMIS Rating:

Health:	2*
Flammability:	1
Reactivity:	0
Personal Protective Equipment:	B (See Section 8)

Potential Health Effects:

Inhalation: This product contains a small amount of formaldehyde which has been classified as carcinogenic to humans. Formaldehyde is considered to have good early warning properties due to its pungent odor. Because the amount in the product is small and vapors are easily detected by smell at levels of 0.8 ppm or higher, exposure can be minimized.

Vapor may irritate nose throat, mouth and Mucous membranes.

Effects include: Pulmonary edema, tightness of chest, hypersensitive individuals may experience allergic respiratory reaction, wheezing, If prolonged exposure to vapor or mist occurs, effects maybe more severe resulting in coughing and breathing difficulties.

Eye Contact: Eye contact can cause irritation.

Prolonged eye contact can result in tissue damage.

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

May cause sensitization.

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: Harmful if ingested.

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If ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Nausea, pulmonary edema (from aspiration into the lungs from vomiting), pain, vomiting, diarrhea and digestive tract irritation.

The following applies to Triethanolamine and associated materials: Triethanolamine has caused blood effects and liver and kidney damage in laboratory animal studies.

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.

Get immediate medical attention.

Ingestion: Do not induce vomiting.

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.

If breathing has stopped, give artificial respiration then oxygen if needed.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not Determined (Aqueous System)

Flash Point Method: Not Applicable

Lower Explosion Limit: Not Available

Upper Explosion Limit: Not Available

Auto-Ignition Temperature: Not Available

NFPA Rating:

Health: 1

Flammability: 1

Reactivity: 0

Extinguishing Media: Product is an aqueous solution and is unlikely to burn until all water has evaporated. 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. Do not scatter spilled material with high pressure water stream. Fog nozzles are preferred if water is used.

Unusual Fire and Explosion Hazards: Heating may release formaldehyde. During fire, oxides of nitrogen may be evolved.

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.

Keep containers closed when not in use.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

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SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

EXPOSURE GUIDELINES (US)

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
4-Nonylphenol, branched, ethoxylated	-	-	-	-	-	-	-
ACRYLIC POLYMER	-	-	-	-	-	-	-
Calcium stearate	-	-	-	-	-	-	-
Formaldehyde	-	-	0.3 ppm Ceiling	3 ppm TWA (unless specified in 1910.1048)	10 ppm STEL (30 min, unless specified in 1910.1048)	-	-
Proprietary Additives	-	-	-	-	-	-	-
Sodium dodecylbenzenesulfonate	-	-	-	-	-	-	-
Triethanolamine	5 mg/m3 TWA	-	-	-	-	-	-

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.

Do not add nitrites to this product. Cancer-causing nitrosamines may be formed.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance/Odor:	Milky white dispersion.
Odor Threshold: (ppm)	0.8 ppm (As Formaldehyde)
pH:	8.0 - 11
Vapor Pressure: (Mm Hg)	~55
Vapor Density: (Air = 1)	Not Determined
Solubility In Water:	Complete
Specific Gravity: (Water = 1)	~1.2
Evaporation Rate: (Butyl Acetate = 1)	Unknown
Boiling Point:	Not Determined
Viscosity:	Unknown
Bulk Density: (Pounds/Cubic Foot)(Pcf)	Not Applicable
% Volatiles (gr/L): (70°F) (21°C)	60 approx.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:	Stable
Conditions To Avoid:	Avoid contact with, Oxidizing materials, Strong oxidizers, Strong acids and Strong bases.
Hazardous Polymerization:	Will not polymerize.
Hazardous Decomposition Products:	Carbon dioxide, Carbon monoxide, Ketones, hydrocarbons, alcohols, Ethers and Polymer fragments.

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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
4-Nonylphenol, branched, ethoxylated	No	No	No	No	No	No
ACRYLIC POLYMER	No	No	No	No	No	No
Calcium stearate	No	No	No	No	No	No
Formaldehyde	Yes	No	No	No	Yes	No
Proprietary Additives	No	No	No	No	No	No
Sodium dodecylbenzenesulfonate	No	No	No	No	No	No
Triethanolamine	No	No	No	No	No	No

Mutagenicity: Not applicable.

Teratogenicity: Not applicable.

Reproductive Toxicity: Not applicable.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No data available for product.

Ecotoxicity: No data available for product.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Procedures:

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Not Applicable

UN/NA Number: Not Applicable

Domestic Hazard Class: Nonhazardous

Surface Freight Classification: Concrete or Masonry Plasticizer

Label/Placard Required: Not Applicable

SECTION 15 - REGULATORY INFORMATION

REGULATORY CHEMICAL LISTS:

CERCLA (Comprehensive Response Compensation and Liability Act):

(None present unless listed below)

Chemical Name	CAS #	Wt %	CERCLA RQ
Sodium dodecylbenzenesulfonate	025155-30-0	1.2	1000 lb final RQ; 454 kg final RQ

SARA Title III (Superfund Amendments and Reauthorization Act)

SARA Section 312/Tier I & II Hazard Categories:

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

302 Reportable Ingredients (Identification Threshold 1%):

Chemical Name	CAS #	Wt %	SARA 302 TPQ
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313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

Chemical Name	CAS #	Wt %
Diethanolamine	000111-42-2	.02496
Ethylene oxide	000075-21-8	.0001
Formaldehyde	000050-00-0	.126
Glycol ethers	RR-00067-9	.4068
Methyl alcohol	000067-56-1	.0288

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National Volatile Organic Compound Emission Standards For Architectural Coatings:

Volatile Organic Content: (gr/L) Not Applicable

WHMIS Classification(s): D2 B

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

State Regulatory Information:

California Proposition 65: WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Ethylene oxide	000075-21-8	.0001
Formaldehyde	000050-00-0	.126

New Jersey Hazardous Substance List(Identification threshold (0.1%)):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Formaldehyde	000050-00-0	.121
Glycol ethers	RR-00067-9	.4068

Pennsylvania Hazardous Substance List(Identification threshold 0.01%):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
Formaldehyde	000050-00-0	.126

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	Not Determined	Not Determined	Not Determined	Not Determined	Not Determined

SECTION 16 - OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

<u>Chemical Name</u>	<u>CAS Number</u>
Water	007732-18-5
Ethylene oxide-Nonylphenol polymer	009016-45-9
Polyethylene glycol	025322-68-3

The information contained in this Material Safety Data Sheet is applicable to the following products:

EFFLORESCENCE CONTROLLING ADMIXTURES
OPTEC® EC-933
OPTEC® EC-855, DARAPEL
DRY-BLOCK BLOCK ADMIXTURE, DRY BLOCK II BLOCK ADMIXTURE
DRY BLOCK MORTAR ADMIXTURE, FOR CAST
HYDRO PEL, OPTEC® EC-250
OPTEC® E-250R
OPTEC® EC-255, OPTEC® EC-255R
DBM-1000

Prepared by: EH&S Department

Approved by: EH&S Department

Approved Date: 10/13/04

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."