W. R. GRACE

MATERIAL SAFETY DATA SHEET

Product Name: WRDA 35

MSDS ID Number: D-06764 MSDS Date: 04/28/2011

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: WRDA 35
MSDS Number: D-06764
Cancelled MSDS Number: D-06228
MSDS Date: 04/28/2011

Chemical Family Name: Aqueous Solution of Lignosulfonate and Amine

Product Use: Concrete Water Reducer/Retarder

Chemical Formula: Mixture-NA
CAS # (Chemical Abstracts Service Mixture-NA

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

Ingredient	CAS#	Percent (max)
Acetic Acid	000064-19-7	< 1
Triethanolamine	000102-71-6	1-10
Triethanolamine Acetate	014806-72-5	1-10

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:

Caution!

Causes eye irritation.

Causes respiratory tract irritation.

May be harmful if ingested.

May cause liver and kidney damage.

HMIS Rating:

Health: 2
Flammability: 1
Reactivity: 0

Personal Protective Equipment: B (See Section 8)

Potential Health Effects:

Inhalation: Causes respiratory tract irritation.

Effects include: 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.

Eye Contact: Eye contact causes irritation.

Prolonged eye contact can result in tissue damage.

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

Effects include: 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.

Product Name: WRDA 35 MSDS ID Number: D-06764

MSDS ID Number: D-06764 MSDS Date: 04/28/2011

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: 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: >93°C/200°F

Flash Point Method: (est.-aqueous system)

Lower Explosion Limit:Not AvailableUpper Explosion Limit:Not AvailableAuto-Ignition Temperature:Not Available

NFPA Rating:

Health: 1
Flammability: 1
Reactivity: 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.

Do not scatter spilled material with high pressure water stream. Fog nozzles are preferred if water is used.

Unusual Fire and Explosion Hazards: None. 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.

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			
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	Substance Specific and Mineral Dust PELs
Acetic Acid	10 ppm TWA	15 ppm STEL	-	10 ppm TWA; 25 mg/m3 TWA	-	-	-

MSDS Date: 04/28/2011

Product Name: WRDA 35 MSDS ID Number: D-06764

Triethanolamine	5 mg/m3 TWA	-	-	-	-	-	-
Triethanolamine Acetate	•	-	-	-	-	-	-

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.

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 expensive dust or exp

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: Dark brown liquid with slight, non-distinct odor.

Odor Threshold: (ppm) Not Determined

pH: 6.5 - 7.5

Vapor Pressure: (Mm Hg)Not ApplicableVapor Density: (Air = 1)Not ApplicableSolubility In Water:CompleteSpecific Gravity: (Water = 1)1.1 - 1.2Evaporation Rate: (Butyl Acetate = 1)Not ApplicableBoiling Point:>100°C/212°FViscosity:Unknown

Bulk Density: (Pounds/Cubic Foot)(Pcf) Not Applicable % Volatiles (gr/L): (70°F)(21°C) ~50% (As Water)

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions To Avoid: None known for this product.

Hazardous Polymerization: Will not polymerize.

Hazardous DecompositionNone known for this product.

Products:

SECTION 11 - TOXICOLOGICAL INFORMATION

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

Carcinogenicity:

Ingredient	IARC	IARC	IARC	NTP	NTP	OSHA
	Group 1	Group 2A	Group 2B	Known	Suspect	
Triethanolamine	No	No	No	No	No	No
Triethanolamine Acetate	No	No	No	No	No	No

Mutagenicity:Not applicable.Teratogenicity:Not applicable.Reproductive Toxicity:Not applicable.

Product Name: WRDA 35

MSDS ID Number: D-06764 MSDS Date: 04/28/2011

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No data available for product. No data available for product. **Ecotoxicity:**

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 Not Applicable **UN/NA Number: Domestic Hazard Class:** Nonhazardous

Surface Freight Classification: Concrete or Masonry Plasticizer & Water Reducing Compound

Label/Placard Required: Not Applicable

SECTION 15 - REGULATORY INFORMATION

REGULATORY CHEMICAL LISTS:

CERCLA (Comprehensive Response Compensation and Liability Act):

(None present unless listed below)

Wt % **Chemical Name CERCLA RQ** CAS#

SARA Title III (Superfund Amendments and Reauthorization Act)

SARA Section 312/Tier I & II Hazard Categories:

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

302 Reportable Ingredients (Identification Threshold 1%.):

Chemical Name CAS# Wt % **SARA 302 TPQ**

313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

Chemical Name	CAS#	<u>Wt %</u>
Diethanolamine	000111-42-2	.01231
Methyl isothiocyanate	000556-61-6	.0001
Sodium o-phenylphenol	000132-27-4	.03
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	000533-74-4	.01

National Volatile Organic Compound Emission Standards For Architectural Coatings:

Volatile Organic Content: (gr/L) 0

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:

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

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

Chemical Name CAS# Wt % .0001 Methyl isothiocyanate 000556-61-6 Sodium o-phenylphenol 000132-27-4 .03

Product Name: WRDA 35 MSDS ID Number: D-06764

MSDS ID Number: D-06764 MSDS Date: 04/28/2011

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

Chemical Name CAS # Wt %

Pennsylvania Hazardous Substance List(Identification threshold 0.01%):

Chemical Name CAS # Wt %

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	No	No	No	No

SECTION 16 - OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

Chemical NameCAS NumberWater007732-18-5Calcium Lignosulfonate008061-52-7

Prepared by: EH&S Department Approved by: EH&S Department OF STATES OF STATE

Approved Date: 04/28/2011

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."