

# SAFETY DATA SHEET



AMERICAN CHEMICAL TECHNOLOGIES, INC.

This SDS conforms to the GHS, ISO 11014-1, and ANSI Z400.1  
This SDS complies with 29 CFR 1910.1200  
Prepared according to EU Directive 1907/2006/EC

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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** FR WG Buffer Package

**Product Code:** FR WG BUFFER

**Product Type:** Specialty chemical

**Recommended Use:** Water Glycol Additive

**Manufacturer/Supplier:**

American Chemical Technologies, Inc.  
485 E. Van Riper Road, Fowlerville, MI 48836  
Office: 517-223-0300 Fax: 517-223-1703

**Emergency Spill Information:**

INFOTRAC 1-800-535-5053 (US & Canada)  
INFOTRAC 1-352-323-3500 (International)  
24 HOURS/DAY, 7 DAYS/WEEK

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## SECTION 2 – HAZARDS IDENTIFICATION

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**GHS Product Classification:**



Skin Corrosion



Acute toxicity - 4  
Skin irritation – 2,3  
Eye irritation – 2A  
Target organ – 3

**Emergency Overview:** Warning: May cause eye, skin, and respiratory tract irritation. May cause liver damage based on animal data. May cause kidney damage based on animal data. May cause lung damage based on animal data.

**Risk Phrases:** None

**Safety Phrases:** S3/14, S14, S26, S27/28, S29/35, S36/37, S36/39, S40, S43, S57, S62, S63

**HMIS III rating:** (Health:2) (Flammability:1) (Physical hazard:1) (Protection: C )

**NFPA Code:** (Health:2) (Flammability:1) (Reactivity:1)

**WHMIS Hazard Class:** D-2B



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### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

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<b><u>Component</u></b>	<b><u>CAS#</u></b>	<b><u>EC#</u></b>	<b><u>Range % by wt.</u></b>
Diethanol amine	11-42-2	Not known	50% - 70%
Morpholine	110-91-8	Not known	10% - 20%
Carboxylic Acid Salt	Proprietary	Not known	5% - 10%
Water	7732-18-5	Not known	5% - 10%

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### SECTION 4 – FIRST AID MEASURES

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**Eyes:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin:** After contact with skin, take off immediately all contaminated clothing, wash immediately with plenty of soap and water.

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately.

**Symptoms/effects:** The primary routes of exposure to this material are eye or skin contact, and inhalation. Prolonged or repeated skin or eye contact may result in irritation. Vapors or mists of diethylene glycol may be irritating to the respiratory tract. The effects of ingestion include nausea, diarrhea, dizziness, drowsiness, kidney damage and possible coma. Chronic overexposure to diethylene glycol may result in kidney and liver damage. Breathing mists by inhalation or ingestion.

**Special treatment:** Treat symptomatically.

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### SECTION 5 – FIRE FIGHTING MEASURES

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**Suitable Extinguishing Media:** In case of fire use dry chemical, carbon dioxide, foam, steam, or water fog.

**Unsuitable Extinguishing Media:** None.

**Specific Hazards:** Keep away from extreme heat and open flames.

**Hazardous Combustion Products:** Incomplete combustion results in oxides of carbon.

**Fire Fighting Equipment:** Fire fighters should wear an approved self-contained breathing apparatus.

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### SECTION 6 – ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** Wear suitable protective clothing and gloves.

**Environmental precautions:** Use appropriate containment to avoid environmental contamination. Do not empty into drains; dispose of this material and its container in a safe way. Spill should be contained, solidified, and placed in suitable containers for disposal. This material is not regulated under RCRA or CERCLA (“superfund”).

**Methods and materials for cleanup:** To clean the floor and all objects contaminated by this material use an inert absorbent material.

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### SECTION 7 – HANDLING AND STORAGE

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**Handling:** No special requirements if handled with reasonable care.

**Storage:** Store in a cool dry place. Keep container closed. Avoid prolonged contact with skin or clothing. Avoid extreme heat.

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### SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

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**Exposure limits:**

<u>Component</u>	<u>CAS#</u>	<u>Country</u>	<u>Long Term (8 Hours TWA)</u>	<u>Short Term (15 min)</u>
Diethanol amine	11-42-2	USA	3 ppm	
Morpholine	110-91-8	USA	20 ppm 70mg/m <sup>3</sup>	

**Engineering Controls:** In case of insufficient ventilation wear suitable respiratory equipment.

**Protective Equipment:** Gloves, coveralls, apron, boots as necessary to prevent skin contact. Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapors/mists. Keep away from food/drink and animal feeding stuffs. Take off immediately all contaminated clothing. Handle in accordance with good industrial hygiene and safety practice.

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### SECTION 9 – CHEMICAL AND PHYSICAL PROPERTIES

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Appearance	: Clear amber liquid
Odor	: Ammonia Odor
Odor Threshold	: Not determined
pH	: 10.7                      Method: ASTM D1293
Melting Point / Freezing Point	: Pour Point -47°C (-53°F)
Initial Boiling Point	: >93°C (>200°F)
Flash Point	: 168°C (334°F)              Method: ASTM D93
Evaporation Rate	: Not determined
Flammability	: Not flammable
Upper/Lower Explosive Limits	: Not determined
Vapor Pressure	: 3.5 mmHg @ 20 °C Method: ASTM D5482
Vapor Density	: 2.1 (air=1)

Specific Gravity	: 1.08 @ 25°C	Method: ASTM D1475
Solubility in Water	: Soluble	
Partition Coefficient	: <3 logP <sub>ow</sub>	Method: ASTM E1147
Autoignition Temperature	: Not determined	Method: ASTM E659
Decomposition Temperature	: Not determined	Method: ASTM E2550
Viscosity	: 48.8 cSt @ 40°C	Method: ASTM D445

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## SECTION 10 – STABILITY AND REACTIVITY

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**Stability:** Stable.

**Conditions to Avoid:** Extreme heat.

**Materials to Avoid:** Segregate from acids and bases. Segregate from strong oxidizing agents.

**Hazardous Decomposition:** None identified.

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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**Eye Contact:** may cause severe eye irritation. May cause severe corneal injury.

**Skin Contact:** Prolonged or repeated contact may cause skin irritation with local redness repeated contact may cause skin burns. Symptoms may include pain, severe and local redness, swelling, and tissue damage.

**Inhalation:** No significant health hazards identified.

**Ingestion:** Do not take internally. Swallowing may result in gastrointestinal irritation or ulceration.

**Existing Medical Conditions Aggravated by Exposure to this Material:** No information found for this mixture.

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## SECTION 12 – ECOLOGICAL INFORMATION

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### -- ENVIRONMENTAL TOXICITY --

**Fish Toxicity:** LC<sub>50</sub> >100 mg/l (Fathead Minnow, 96 Hr.)

### -- ENVIRONMENTAL FATE --

**Persistence and Degradability:** Not determined.

**Bioaccumulative Potential:** Not determined.

**Mobility in Soil:** Not determined.

**Other Adverse Effects:** None identified.

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**SECTION 13 – DISPOSAL INFORMATION**


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**Waste Disposal Method:** **DO NOT** discharge into waterways or sewer systems. Dispose of in accordance with all local, state and federal regulations.

**Waste Disposal:** This product does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of subpart C, nor is it listed as a hazardous waste under subpart D. As a non-hazardous liquid waste, it should be disposed of in accordance with local, state and federal regulations by incineration. Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and non-hazardous wastes.

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**SECTION 14 – TRANSPORTATION INFORMATION**


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<b>UN Number</b>	3077
<b>UN Proper Shipping Name:</b>	Environmentally hazardous substances, solid, n.o.s (diethanolamine)
<b>Transport Hazard Class</b>	9
<b>Package Group</b>	III
<b>Marine Pollutant</b>	No
<b>Special Precautions</b>	None

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**SECTION 15 – REGULATORY INFORMATION**


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**-- Global International Chemical Inventories --**

<b>USA</b>	All components of this material are on the US TSCA Inventory or are exempt.
<b>Canada</b>	All components of this material are DSL listed or are exempt.

**-- Other U.S. Federal Regulations --**

**EPA 550-B-01-003** This product does not contain greater than 1.0% of any chemical substances (0.1% for carcinogens) listed on the Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Clean Air Act Section 112(r): EPCRA Section 302 Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA Section 313 Toxic Chemicals, CAA 112(r) Regulated Chemicals For Accidental Release Prevention.

**SARA 311 Classifications**

Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No
Immediate (Acute) Hazard	Yes
Delayed (Chronic) Hazard	No

**-- State Regulations --**

<b><u>Component</u></b>	<b><u>CAS#</u></b>	<b><u>State RTK.</u></b>
Diethanol amine	11-42-2	PA
Morpholine	110-91-8	MA,NJ,PA

**Cal. Prop. 65** This product contains a chemical(s) known by the State of California to cause cancer and/or birth defects.

**-- Other / International --**

**Harmonized Tariff Schedule Number** 3811.19.0000 Lubricant Additives

## SECTION 16 – SPECIAL PRECAUTIONS

**Label text:**

Handling: No special requirements if handled with reasonable care.

First Aid:

Eye: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin: After contact with skin, take off immediately all contaminated clothing, wash immediately with plenty of soap and water.

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately.

Fire: In case of fire use dry chemical, carbon dioxide, foam, steam, or water fog.

Spill or Leak: To clean the floor and all objects contaminated by this material use an inert absorbent material.

**Prepared By:** Mark D. Latunski  
**Date Revised:** 19 November 2013  
**Supersedes:** 15 January 2012  
**Date Prepared:** 29 November 2005

The information provided herein is believed to be accurate to the best of the company's knowledge as of the date of its issue. We do not warrant or guarantee the information provided and will not be held liable for any loss or damage from its use.

**Date Translated:** 19 November 2013

This SDS originated in English. Context errors associated with the translation to other languages are avoided to the best of our ability. If the translation is unclear, please reference the English version.