

# 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 200-D

**Product Code:** FR WG 200-D

**Product Type:** Aqueous Glycol

**Recommended Use:** Hydraulic Fluid

**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 irritation – 3

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,S7,S13,S14,S26,S27,S28,S29,S35,S36,S37,S40,S43,S57,S62,S63,S64

**HMIS Code:** (Health:1) (Flammability:0) (Reactivity:0) (Protection: B )

**NFPA Code:** (Health:1) (Flammability:0) (Reactivity:0)

**WHMIS Code:**  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>
Diethylene Glycol	111-46-6	203-872-2	35% - 45%
Water	7732-18-5	231-791-2	30% - 40%
Polyalkylene Glycol	52624-57-4	Polymer	10% - 15%
Morpholine	110-91-8	203-815-1	0% - 1%
Diethanolamine	111-42-2	203-868-0	0% - 1%

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**SECTION 4 – FIRST AID MEASURES**


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**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, and 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, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting; seek medical advice immediately.

**Symptoms/effects:** Mild irritation may occur with overexposure.

**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:** None.

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

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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.

**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:** Keep container tightly closed in a cool place. Keep away from extreme heat. Keep away from food, drink and animal foodstuffs.

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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>
Morpholine	110-91-8	USA	20 ppm, 70 mg/m <sup>3</sup>	30 ppm, 105 mg/m <sup>3</sup>

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

**Protective Equipment:** Wear suitable protective clothing and gloves.

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## SECTION 9 – CHEMICAL AND PHYSICAL PROPERTIES

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Appearance	: Slightly hazy, red liquid	
Odor	: Slight glycol odor	
Odor Threshold	: Not determined	
pH	: 9.6	Method: ASTM D1293
Melting Point / Freezing Point	: Not determined	
Initial Boiling Point	: 102°C (215°F)	
Flash Point	: None*	Method: ASTM D92
Evaporation Rate	: Not determined	
Flammability	: Not Flammable	
Upper/Lower Explosive Limits	: Not applicable	
Vapor Pressure	: Not determined	Method: ASTM D5482
Vapor Density	: Not determined	
Specific Gravity	: 1.08 (water=1)	Method: ASTM D1475
Solubility in Water	: Soluble	
Partition Coefficient	: Not determined	Method: ASTM E1147
Autoignition Temperature	: **None	Method: ASTM E659
Decomposition Temperature	: Not determined	Method: ASTM E2550
Viscosity	: 46.0 cSt @ 40°C	Method: ASTM D445

\*After water has been completely evaporated, flash point is 121°C (394 °F).

\*\*After water has been completely evaporated, auto-ignition temperature is 765 °F.

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**SECTION 10 – STABILITY AND REACTIVITY**

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**Chemical Stability:** Stable.

**Hazardous Reactions:** None.

**Conditions to Avoid:** Keep away from extreme heat.

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

**Hazardous Decomposition Products:** None identified.

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**SECTION 11 – TOXICOLOGICAL INFORMATION**

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**Eye Contact:** Prolonged or repeated contact may cause eye irritation.

**Skin Contact:** Prolonged or repeated contact may cause skin irritation.

**Inhalation:** Vapors or mists of diethylene glycol may be irritating to the respiratory tract.

**Ingestion:** The effects of ingestion include nausea, diarrhea, dizziness, drowsiness, kidney damage and possible coma.

**Primary Routes of Entry:** The primary routes of exposure to this material are eye or skin contact, and inhalation. Breathing mists by inhalation or ingestion.

**- ACUTE EXPOSURE -**

**Rat, Oral Ld:** >2000 mg/kg

**Rabbit, Skin Irritation:** non-irritant (OECD 404)

**Rabbit, Eye Irritation:** non-irritant (OECD 405)

**-- CHRONIC EXPOSURE --**

Toxicological testing has not been conducted on this product.

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**SECTION 12 – ECOLOGICAL INFORMATION**

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**-- ENVIRONMENTAL TOXICITY --**

**Fish Toxicity:**

LC<sub>50</sub> = 4,879 mg/L (Pimephales promelas, 96 Hr.)

NOAEC = 2,160 mg/L (Pimephales promelas, 96 Hr.)

**Aquatic Toxicity:**

LC<sub>50</sub> = 1,946 mg/L (Daphnia magna, 48 Hr.)

NOAEC = 777.6 mg/L (Daphnia magna, 48 Hr.)

**-- ENVIRONMENTAL FATE --**

**Persistence and Degradability:**

BOD<sub>5</sub> = 28.8 mg O<sub>2</sub>/g; COD = 887 mg O<sub>2</sub>/g (3.2%)

**Bioaccumulative Potential:** None.

**Mobility in Soil:** Not determined.

**Other Adverse Effects:** None identified.

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**SECTION 13 – DISPOSAL INFORMATION**

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Do not empty into drains; dispose of this material and its container as non-hazardous waste. Use appropriate containment to avoid environmental contamination

This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.

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**SECTION 14 – TRANSPORTATION INFORMATION**

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<b>UN Number</b>	Not regulated.
<b>UN Proper Shipping Name:</b>	Not regulated.
<b>Transport Hazard Class</b>	Not regulated.
<b>Package Group</b>	Not regulated.
<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>EEC</b>	All components are in compliance with the EC 7 <sup>th</sup> Amendment Directive 92/32/EEC.
<b>Canada</b>	All components of this material are DSL listed or are exempt.
<b>Japan</b>	All components are in compliance with the Chemical Substances Control Law of Japan.
<b>Australia</b>	All components are in compliance with chemical notification requirements in Australia.
<b>Korea</b>	All components are in compliance in Korea.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>China</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

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

**CERCLA Hazardous Substance: Diethanolamine**

**SARA 313: Diethanolamine**

**SARA 311 Classifications**

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

**-- State Regulations --**

<b><u>Component</u></b>	<b><u>CAS#</u></b>	<b><u>State RTK</u></b>	<b><u>Range % by wt.</u></b>
Diethylene Glycol	111-46-6	PA	35% - 45%
Morpholine	110-91-8	MA, NJ, PA	0% - 1%
Diethanolamine	111-42-2	MA, PA	0% - 1%

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

**-- Other / International --**

**Harmonized Tariff Schedule Number** 3403.99.0000

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**SECTION 16 – SPECIAL PRECAUTIONS**

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**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, and 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, rinse mouth with water (only if the person is conscious). 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:** 28 April 2014  
**Supersedes:** 20 May 2013  
**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:** 28 April 2014

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.