



AMERICAN CHEMICAL TECHNOLOGIES, INC.

# SAFETY DATA SHEET

This SDS conforms to the GHS, ISO 11014-1, and ANSI Z400.1

This SDS complies with 29 CFR 1910.1200

Issue Date: 2017-01-06

Prepared according to EU Directive 1907/2006/EC and 1272/2008/EC

Print Date: 2017-01-06

Prepared according to JIS Z 7252-2009

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## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** EcoSafe® FR-46

**Product Code:** ESR-46

**Product Type:** Polyether Polyol Lubricant

**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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**Hazard Classification:** This product does not require any hazard warning on the label in accordance with GHS criteria.

**Signal word:** NONE

**Hazard Statements:** None

**Precautionary Statements:** P210, P233, P262, P264, P273, P302+352, P305+351+338, P340, P301+330+331, P313, P378, P391, P374, P280, P410+412, P270

**Handling:** Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

**First Aid:**

**Eye: IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

**Skin: IF ON SKIN:** Wash with plenty of water and soap.

**Inhalation:** Remove person to fresh air and keep comfortable for breathing.

**Ingestion: IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

**Fire:** Use dry chemical, carbon dioxide, foam, steam, or water fog to extinguish.

**Spill or Leak:** Collect spillage. Avoid release to the environment.

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## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

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**Synonyms :**

This product is a mixture.

<b><u>Component</u></b>	<b><u>CAS#</u></b>	<b><u>EC#</u></b>	<b><u>Range % by wt.</u></b>
Polyether polyol	Proprietary	Not known	90% - 100%
Phenothiazine	92-84-2	202-196-5	0.1% - 0.9%

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#### SECTION 4 – FIRST AID MEASURES

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**Eye:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

**Skin:** IF ON SKIN: Wash with plenty of water and soap.

**Inhalation:** Remove person to fresh air and keep comfortable for breathing.

**Ingestion:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

**Symptoms/effects:** May cause mild irritation with overexposure

**Special treatment:** Treat symptomatically.

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#### SECTION 5 – FIRE FIGHTING MEASURES

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**Suitable Extinguishing Media:** Use dry chemical, carbon dioxide, foam, steam, or water fog to extinguish.

**Unsuitable Extinguishing Media:** Water.

**Specific Hazards:** Keep away from extreme heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

**Fire Fighting Equipment:** Fight fire with normal precautions from a reasonable distance.

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#### SECTION 6 – ACCIDENTAL RELEASE MEASURES

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

**Environmental precautions:** Avoid release to the environment.

**Methods and materials for cleanup:** Collect spillage.

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#### SECTION 7 – HANDLING AND STORAGE

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**Precautions for safe handling:** Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep container tightly closed.

**Conditions for safe storage:** No special storage precautions required.

**Shelf life:** 2 years

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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</u> <u>(8 Hours TWA)</u>	<u>Short Term</u> <u>(15 min)</u>
Phenothiazine	94-84-2	USA	5 mg/m <sup>3</sup> (skin)	None

**Engineering Controls:** None.**Protective Equipment:** Wear protective gloves/protective clothing/eye protection/face protection.

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**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**


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Appearance	: Clear blue liquid
Odor	: Mild
Odor Threshold	: Not determined
pH	: Not applicable      Method: ASTM D1293
Melting Point / Freezing Point	: Pour Point -42°C ( -44°F)
Initial Boiling Point	: Not determined
Flash Point	: 274 °C (525°F)      Method: ASTM D92
Evaporation Rate	: Not determined
Flammability	: Not flammable
Upper/Lower Explosive Limits	: Not determined
Vapor Pressure	: <0.5 mm Hg @ 37.8 °C      Method: ASTM D5191
Vapor Density	: Not determined
Specific Gravity (15 °C / 4 °C)	: 0.990      Method: ASTM D4052
Solubility in Water	: <1g/100g @ 25 °C
Partition Coefficient	: log P <sub>ow</sub> ≥ 2.90      Method: OECD 117
Autoignition Temperature	: 401 °C (754 °F)      Method: ASTM E659
Decomposition Temperature	: 226 °C (439 °F)      Method: ASTM E2550
Viscosity	: 50.0 cSt @ 40°C      Method: ASTM D445

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**SECTION 10 – STABILITY AND REACTIVITY**


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**Reactivity:** Not reactive.**Chemical Stability:** Material is normally stable at moderately elevated temperatures and pressures.

**Hazardous Reactions:** None.

**Conditions to Avoid:** None identified.

**Materials to Avoid:** Chlorine, fluorine, and other strong oxidizers.

**Hazardous Decomposition Products:** None identified.

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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### - ACUTE EXPOSURE -

<b>Dermal</b>	The LD50 in rabbits is > 2000 mg/kg. Based on data from components or similar materials. No data available to indicate product or components may be a sensitization hazard.
<b>Inhalation</b>	No data available to indicate product or components may be an inhalation toxicity or sensitization hazard.
<b>Ingestion</b>	The LD50 in rats is between 2000 mg/kg and 5000 mg/kg. Based on data from components or similar materials. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

### -- CHRONIC EXPOSURE --

<b>Eye</b>	Prolonged or repeated contact may cause eye irritation.
<b>Dermal</b>	Prolonged or repeated contact may cause skin irritation.
<b>Carcinogenicity</b>	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive</b>	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

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## SECTION 12 – ECOLOGICAL INFORMATION

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### -- ENVIRONMENTAL TOXICITY --

**Fish Toxicity:** LC<sub>50</sub> = 23.7 mg/L (Pimephales promelas, 96 Hr., OECD 203)

**Invertebrate Toxicity:** LC<sub>50</sub> = 18.6 mg/L (Daphnia magna, 48 Hr., OECD 202)

**Vascular Plant Toxicity:** Not determined.

**Algae Toxicity:** Not determined.

**Bacteria Toxicity:** IC<sub>50</sub> = >1000 mg/L (Bacteria, 16 h, static test)

### -- ENVIRONMENTAL FATE --

**Persistence and Degradability:** 91.2% OECD301B 28 days  
BOD<sub>5</sub> = 1.3 mg O<sub>2</sub>/g; COD = 2180 mg O<sub>2</sub>/g (0.06%)

**Bioaccumulative Potential:** 1 - 10% of the components potentially bioconcentrate, based on octanol/water coefficients.

**Mobility in Soil:** Not determined.

**Other Adverse Effects:** None identified.

**Water Hazard Class:** WGK = 1 – Low Hazard to waters

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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.

This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. This material, if discarded, should be considered a European non-hazardous waste in accordance with Directive 91/689/EC.

European Waste Catalog Code (EWC-code): 13 01 12

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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 List of Existing and New Chemical Substances (ENCS) of Japan.
<b>Australia</b>	All components are in compliance with the Australian Inventory of Chemical Substances (AICS).
<b>Korea</b>	All components are in compliance with the Korea Existing Chemicals List (KECL)
<b>Philippines</b>	All components are in compliance with the Philippines Inventory of Chemicals and Chemical Substances (PICCS).
<b>China</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

#### -- Chemical Substance Control Laws --

<b>EPA 550-B-01-003</b>	This product does not contain greater than 1.0% of any chemical substances (0.1% for carcinogens) listed on the Consolidated List of
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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	No
Delayed (Chronic) Hazard	No

**-- Right-to-Know Regulations --**

**Cal. Prop. 65** This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, American Chemical Technologies does not routinely analyze its products for impurities which may be such chemicals.

**-- Other / International --**

**Harmonized Tariff Schedule Number** 3403.99.0000

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**SECTION 16 – OTHER INFORMATION**

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**Revision Note:** Autoignition temperature

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

**Prepared By:** David J. Patterson

**Date Revised:** 2017-01-06

**Supersedes:** 2016-07-25

**Date Prepared:** 2001-01-19

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:** 2017-01-06

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.