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 Issue Date: 2016-08-05
Prepared according to EU Directive 1907/2006/EC and 1272/2008/EC Print Date: 2016-08-05
Prepared according to JIS Z 7252-2009

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: EcoSafe® FR-68
Product Code: ESFR-68

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

SECTION 2 – HAZARDS IDENTIFICATION

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.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms :
This product is a mixture.

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

SECTION 4 – FIRST AID MEASURES

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.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use dry chemical, carbon dioxide, foam, steam, or water fog to extinguish. Water can be used to cool and protect exposed materials.

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.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear suitable protective clothing and gloves.

Environmental precautions: Avoid release to the environment.

Methods and materials for cleanup: Collect spillage.

SECTION 7 – HANDLING AND STORAGE

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

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

Component	CAS#	Country	Long Term (8 Hours TWA)	Short Term (15 min)
Phenothiazine	94-84-2	USA	5 mg/m^3 (skin)	None

Engineering Controls: None.

Protective Equipment: Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear blue liquid	
Odor	: Mild	
Odor Threshold	: Not determined	
pH	: Not applicable	Method: ASTM D1293
Melting Point / Freezing Point	: Pour Point -39°C (-38 °F)	
Initial Boiling Point	: Not determined	
Flash Point	: 307 °C (585°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)	: 0.993	Method: ASTM D4052
Solubility in Water	: <1g/100g @ 25 °C	
Partition Coefficient	: Not determined	Method: OECD 117
Autoignition Temperature	: 382 °C (720 °F)	Method: ASTM E659
Decomposition Temperature	: Not determined	Method: ASTM E2550
Viscosity	: 68.0 cSt @ 40°C	Method: ASTM D445

SECTION 10 – STABILITY AND REACTIVITY

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.

SECTION 11 – TOXICOLOGICAL INFORMATION

- ACUTE EXPOSURE --

Dermal	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.
Inhalation	No data available to indicate product or components may be an inhalation toxicity or sensitization hazard.
Ingestion	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 --

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

SECTION 12 – ECOLOGICAL INFORMATION

-- ENVIRONMENTAL TOXICITY --

Fish Toxicity: LC_{50} is 100 – 1000 mg/L based on similar products.

Invertebrate Toxicity: Not determined

Vascular Plant Toxicity: Not determined.

Algae Toxicity: Not determined.

Bacteria Toxicity: Not determined.

-- ENVIRONMENTAL FATE --

Persistence and Degradability: 78.2% OECD301B 28 days
COD = 0.88 mg O_2/g

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

SECTION 13 – DISPOSAL INFORMATION

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

SECTION 14 – TRANSPORTATION INFORMATION

UN Number	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class	Not regulated.
Package Group	Not regulated.
Marine Pollutant	No
Special Precautions	None

SECTION 15 – REGULATORY INFORMATION

-- Global International Chemical Inventories --

USA	All components of this material are on the US TSCA Inventory or are exempt.
EEC	All components are in compliance with the EC 7th Amendment Directive 92/32/EEC.
Canada	All components of this material are DSL listed or are exempt.
Japan	All components are in compliance with the List of Existing and New Chemical Substances (ENCS) of Japan.
Australia	All components are in compliance with the Australian Inventory of Chemical Substances (AICS).
Korea	All components are in compliance with the Korea Existing Chemicals List (KECL)
Philippines	All components are in compliance with the Philippines Inventory of Chemicals and Chemical Substances (PICCS).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

-- Chemical Substance Control Laws --

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	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

SECTION 16 – OTHER INFORMATION

Revision Note: CLP Compliance.

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

Prepared By: Mark D. Latunski
Date Revised: 2016-08-05
Supersedes: 2014-02-08
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: 2016-08-05

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.