UPDATED: 6/10/2020

SAFETY DATA SHEET

<u>1. Product Identifier</u>

Product form Trade name Product Number(s) Substance Airline Antifreeze B1800, B1805, B18055

Relevant Uses Uses of Mixture:

Airline Antifreeze

Supplier Details

Manufacturer Name Address: City, State, Zip Phone Fax The Berkebile Oil Company, Inc. 1216 Red Brant Road Somerset, PA 15501 814-443-1656 814-443-2873

Emergency Contact

Chemtrec Emergency Tel # 800-424-9300

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Flam.Liq.2	H225
Acute Tox. 3 (Oral)	H301
Acute Tox 3 (Dermal)	H311
Acute Tox 3 (Inhalation)	H331
Eye Irrit. 2A	H319
Repr. 1B	H360
STOT SE 1	H370

2.2 Label Elements





PAGE 2 OF 8 PAGES

UPDATED: 6/10/2020

Hazzard Statements (GHS-US)

H225 – Highly flammable liquid and vapor

H301+311+H331 – Toxic if swallowed, in contact with skin, or inhaled

H319 – Causes serious eye irritation

H360 – May damage fertility or the unborn child

H370 – Causes damage to organs

Precautionary Statements (GHS-US)

- P202 Do not handle until all safety precautions have been read and met
- P210 Keep away from heat, sparks, open flames, hot surfaces No Smoking
- P233 Keep container tightly closed
- P240 Ground/bond container and receiving equipment
- P241 Use explosion-proof electrical, ventilating, lighting equipment
- P242 Use only non-sparking tools
- P243 Take precautionary measures against static discharge
- P261 Do not breathe vapors
- P264 Wash hands thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves, protective clothing, eye protection, face protection
- P301+P310 If swallowed: Immediately call a doctor
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
- P307+P311 If exposed: Call a poison center/doctor
- P330 Rinse mouth
- P361 Take off immediately all contaminated clothing
- P363 Wash contaminated clothing before reuse
- P370+P378 In case of fire: Use Water spray to extinguish
- P403+P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P501 Dispose of contents/container to licensed waste management site
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention
 - Obtain special instructions before use.
 - Keep Cool

3. Composition / Information on Ingredients

PAGE 3 OF 8 PAGES

UPDATED: 6/10/2020		
Chemical name	Common name and synonyms	CAS number
%		
Methanol	67-56-1	95-100

4. First Aid Measures

First-aid measures general	:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTER or doctor/physician. Methanol is toxic and flammable. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment and remove any sources of ignition).
First-aid measures after inhalation	:	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Obtain medical attention.
First-aid measures after skin contact	:	Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.
First-aid measures after eye contact	:	Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Ensure that folded skin of eyelids is thoroughly washed with water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.
4.2 Most Important Symptoms	:	Symptoms may include: dizziness, headache, nausea and loss of coordination. Coma and death may occur is medical treatment is not sought.

5. Fire-Fighting Measures

Flammable Properties:As defined by OSHA, this product is a Class IB flammable liquid.Suitable Extinguishing Media:Dry chemical, alcohol-resistant foam, carbon dioxide (CO2)Products of Combustion:Carbon dioxide and carbon monoxide.Explosion Hazards:Containers, when exposed to heat from fire, may build pressure andrupture.Firefighters:Protection of Fire-Fighters:Firefighters should wear self-contained, NIOSH-approved breathing

apparatus for protection against suffocation and possible toxic decomposition products. Proper eye

UPDATED: 6/10/2020

and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

6. Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains. If run-off occurs, notify the proper authorities as required, that a spill has occurred.

Methods for Containment & Clean-up: Eliminate all ignition sources. Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

7. Handling and Storage

Handling Procedures: Avoid contact with skin and eyes. Do not use near sources of ignition or energized equipment. Static ignition hazard can result from handling and use. Electrically bond and ground all containers and equipment before transfer or use of material. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep containers closed when not in use. Keep out of reach of children and pets.

Aerosol Storage Level: NA

8. Exposure Controls / Personal Protection

	OSHA		ACGIH		OTHER	OTHER	
COMPONENT	TWA	STEL	TWA STEL	TWA	TWA	SOURCE	UNIT
Methanol	200	NE	200 (s)	250 (s)	NE		ppm
NE							
N.E Not Established (c)-Ceiling (s)-Skin (v)-Vacated							

Exposure Guidelines:

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations. Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to

PAGE 5 OF 8 PAGES

UPDATED: 6/10/2020

determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or natural rubber. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

9. Physical and Chemical Properties

Physical state	:	Liquid
Appearance	:	Clear.
Molecular mass	:	32.04 g/mol
Color	:	Colorless.
Odor	:	alcohol odor.
Odor threshold	:	4.2 - 5960 ppm
рН	:	Not applicable
Relative evaporation rate (butyl acetate=1)	:	4.1
Melting point	:	-97.8 °C
Freezing point	:	-97.6 °C
Boiling point	:	64.7 °C
Flash point	:	11 °C
Auto-ignition temperature	:	464 °C
Decomposition temperature	:	Not available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	12.8 kPa @ 20°C
Relative vapor density at 20 °C	:	1.1
Relative density	:	0.791 - 0.793 @ 20°C
Relative density of saturated gas/air mixture	:	1.0
Specific gravity / density	:	792 kg/m³
Solubility	:	Miscible with water.
Log Pow	:	0.82
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	0.8 cP (25 °C)
Explosive properties	:	vapors may form explosive mixture with air.
Oxidizing properties	:	Not oxidizing.
Explosive limits	:	5.5 - 36.5 vol %

10. Stability and Reactivity

Stability: Stable

Conditions to Avoid: Sources of ignition.

Incompatible Materials: Hypochlorites, peroxides, reactive metals such as aluminum and magnesium, sodium, strong acids, strong bases, strong oxidizing agents, zinc Hazardous Decomposition Products: Carbon dioxide and carbon monoxide

Possibility of Hazardous Reactions: No

PAGE 6 OF 8 PAGES

UPDATED: 6/10/2020

Methanol

11. Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

LD50 Oral (rat)	5600 mg/kg			
LD50 Dermal (rabbit)	15800 mg/kg			
Inhallation (rat) ppm	64000 ppm/4h (rat)			

Reproductive Toxicity: No information available

Teratogenicity: Methanol has produced fetotoxicity in rats and teratogenicity in mice exposed by inhalation to high concentrations of methanol vapors.

Mutagenicity: No information available

Synergistic Effects: High concentrations of methanol can increase the toxicity of other chemicals, particularly liver toxins.

12. Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available

Persistence / Degradability: No information available

Bioaccumulation / Accumulation: No information available

Mobility in Environment: No information available

13. Disposal Considerations

Waste Classification: This product is a RCRA hazardous waste for the characteristic of ignitability with the following potential waste codes: D001, F003, U154. (See 40 CFR Part 261.20 – 261.33) Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

14. Transport Information

US DOT (ground):	05532, 75532 05528, 05555, 75528	UN1230, Methanol, 3, PGII, Limited Quantity** UN1230, Methanol, 3, PG II
ICAO/IATA (air):	05532, 75532	UN1230, Methanol, 3 (6.1), PG II, Limited Quantity
	05528, 05555, 75528	UN1230, Methanol, 3 (6.1), PGII
IMO/IMDG (water):	05532, 75532	UN1230, Methanol, 3 (6.1), PG II, Limited Quantity
	05528, 05555, 75528	UN1230, Methanol, 3 (6.1), PGII

15. Regulatory Information

PAGE 7 OF 8 PAGES

UPDATED: 6/10/2020

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Methanol (5000 lbs) Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III: Section 302 Extremely Hazardous Substances (EHS): None Section 311/312 Hazard Categories: Fire Hazard Yes Reactive Hazard No Release of Pressure No Acute Health Hazard Yes Chronic Health Hazard No Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: Methanol (> 99%)

<u>Clean Air Act:</u> Section 112 Hazardous Air Pollutants (HAPs): Methanol

<u>Occupational Safety and Health Administration:</u> This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65): This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Methanol

<u>Consumer Products VOC Regulations:</u> This product is not regulated.

State Right to Know:

New Jersey: 67-56-1 Pennsylvania: 67-56-1 Massachusetts: 67-56-1 Rhode Island : 67-56-1

Canadian Regulations:

PAGE 8 OF 8 PAGES

UPDATED: 6/10/2020

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: B2, D1B, D2A, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

<u>RoHS Compliance</u>: This product is compliant with Directive 2002/95/EC of the European Parliament and of the

Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

16. Other Information



HMIS II

HEALTH	1
FLAMABALITY	3
PHYSICAL HAZZARD	0

Prepared By: Kirk Sherbine Berkebile Oil #: B1800-030115 Revision Date: 3/1/2015 Changes since last revision: All

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