SAFETY DATA SHEET

1. Product Identifier

Product form Substance

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

Relevant Uses

Uses of Mixture: Airline Antifreeze

Supplier Details

Manufacturer Name The Berkebile Oil Company, Inc.

Address: 1216 Red Brant Road City, State, Zip Somerset, PA 15501

Phone 814-443-1656 Fax 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



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Signal Word (GHS-US)

Danger

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

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Chemical name	Common name and synonyms	CAS number
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%

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 and

rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye

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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

Exposure Guidelines:

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

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

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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
pH : Not applicable

Relative evaporation rate (butyl acetate=1) 4.1 Melting point -97.8 °C -97.6 °C Freezing point 64.7 °C **Boiling point** Flash point 11 °C 464 °C Auto-ignition temperature 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

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Possibility of Hazardous Reactions: No

11. Toxicological Information

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

Methanol

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 UN1230, Methanol, 3, PGII, Limited Quantity**

05528, 05555, 75528 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

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15. Regulatory Information

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.

<u>Superfund Amendments Reauthorization Act (SARA) Title III:</u>

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%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): Methanol

Occupational Safety and Health Administration:

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

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

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

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Rhode Island: 67-56-1

Canadian Regulations:

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

FPPA Fire:



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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