

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: **BERKEBILE OIL 2+2 Diesel Defrost (B-2001)**

MANUFACTURER'S NAME: The Berkebile Oil Company, Inc.

ADDRESS: 1216 Red Brant RD

Somerset, PA 15501

EMERGENCY PHONE : **708-598-7100**

INFORMATION PHONE : **708-598-7100**

Product Use: Multi-purpose penetrating lubricant



2. HAZARDS IDENTIFICATION

CLASSIFICATION

Flammable Liquids	4
Skin Corrosion/Irritation	2
Eye Damage/Irritation	2A
Aspiration hazard	1
Acute Toxicity, Oral	4
Acute Toxicity, Inhalation	4
Acute Toxicity, Dermal	4
Specefic Target Organ Toxicity (Single Exposure)(Narcotic Effects)	3



SIGNAL WORD: DANGER

Hazard Statements

Combustible liquid.
Harmful if in contact with skin or if inhaled
Causes skin irritation.
Causes serious eye irritation.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.

Precautionary Statements

Keep away from heat/sparks/open flames/hot surfaces – No smoking
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Do NOT induce vomiting
IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. DO NOT induce vomiting
IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Store in a well-ventilated place. Keep cool. Store locked up.

Dispose of contents and container in accordance with all local, regional, national and international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Percent
2-Butoxethanol	111-76-2	60-75
Distillates Petroleum	64742-47-8	25-40

4. FIRST AID MEASURES

INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

EYE CONTACT: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SKIN CONTACT: Wash off with soap and plenty of water. Continue to rinse for at least 10 minutes. Consult a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INGESTION: Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed:

Repeated exposure may cause skin dryness or cracking. May cause drowsiness or dizziness.

Indication of immediate medical attention and special treatment needed: None known.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Do not use water jet.

Specific hazards arising from the chemical: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special equipment and precautions for fire-fighters: Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment,

and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment

and cleaning up: Contain spillage. Stop leak if without risk. Move containers from spill

area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of according to local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Keep tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. DO NOT reuse container.

Conditions for safe storage,

including any incompatibilities: Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Store in original container, keep closed in a secure location. Combustible liquid.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits (TLV)	NIOSH Recommended Exposure Limits	CALIF. PEL for chemical containments (Tittle 8, Article 107)
2-Butoxyethanol 111-76-2	TWA: 50.0000 ppm 240.0000 mg/m3	TWA: 20.000000 ppm	TWA: 5.0000 ppm 24.0000 mg/m3	PEL: 20 ppm 97 mg/m3
REMARKS:	Skin designation The value in mg/m3 is approximate	Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans	Potential for dermal absorption	Skin
Distillates Petroleum, 64742-47-8	TWA: 500.0000 ppm 5.0000 mg/m3	TWA: 200.0000 mg/m3	TWA: 5.0000 mg/m3	PEL: 5mg/m3
REMARKS:		Central Nervous System impairment Upper Respiratory Tract irritation Skin irritation Application restricted to conditions in which there are negligible aerosol exposures Confirmed animal carcinogen with unknown relevance to humans Danger of cutaneous absorption varies		As sampled by method that does not collect vapor

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures

Respiratory protection: None under normal use. Avoid breathing vapors. In restricted areas , use approved

chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use an approved air line respirator or hood. Self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.

Protective gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Other protective clothing or equipment: None under normal use. However, use of solvent-resistant aprons or other clothing is recommended. Eye washes and safety showers in the workplace are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless Liquid	Odor: No Data Available
Vapor Pressure: Not determined	Odor threshold: Not determined
Vapor Density: Not determined	pH: Not applicable
Density: Not Determined	Melting point: -67°C (-88°F)
Freezing point: Not determined	Solubility: Not determined
Boiling point: 169°C (336°F)	Flash point: 67°C (153°F)
Evaporation rate: Not Available	Flammability: Level 4 Liquid
Explosive Limits: Upper: 6%V Lower: 0.6%V	Partition coefficient (n-octanol/water): Not determined
Autoignition temperature: 230°C (336°F)	Decomposition temperature: Not determined
Viscosity: Not determined	

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.

Chemical stability: Stable under recommended storage and handling conditions.

Possibility of hazardous reactions: No Data available

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Acute toxicity

2-Butoxethanol (CAS# 111-76-2)
LD50 Oral - Rat - male - 880 mg/kg
(OECD Test Guideline 401)
Inhalation: No data available
LD50 Dermal - Rabbit - male - 1,060 mg/kg
(OECD Test Guideline 402)
LD50 Intraperitoneal - Rat - 220 mg/kg
LD50 Intravenous - Rat - 307 mg/kg

Skin corrosion/irritation

2-Butoxethanol (CAS# 111-76-2)

Skin - Rabbit
Result: Skin irritation - 20 h

Serious eye damage/eye irritation

2-Butoxethanol (CAS# 111-76-2)
Eyes - Rabbit
Result: Eye irritation - 24 h
(OECD Test Guideline 405)

Respiratory or skin sensitization

2-Butoxethanol (CAS# 111-76-2)
Maximization Test - Guinea pig
Result: Does not cause skin sensitization.
(OECD Test Guideline 406)

Germ cell mutagenicity

2-Butoxethanol (CAS# 111-76-2)
Hamster
ovary
Result: negative
OECD Test Guideline 474
Mouse - male
Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death. Specific target organ toxicity - repeated exposure

Specific target organ toxicity - single exposure

Kidney: caused kidney effects in male rats which are not considered relevant to humans

Aspiration hazard

Category 1 Aspiration Hazard

Additional Information

Human exposure above 200 ppm can be expected to cause narcosis, damage to the kidney and liver and present an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, leukocytosis, and would be likely to cause fragility of erythrocytes and hematuria. Swallowing of 2-butoxyethanol results in a sour taste that turns to a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings., Central nervous system depression, Headache, narcosis.

12. ECOLOGICAL INFORMATION

Long-term ecological studies have not been conducted for this product.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, and federal regulations. Contact a licensed professional waste disposal service to dispose of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

14. TRANSPORT INFORMATION**DOT (US)**

NA-Number: 1993 Class: NONE Packing group: III
 Proper shipping name: Combustible liquid, n.o.s.
 Reportable Quantity (RQ):

Poison Inhalation Hazard: No

IMDG

Not Dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
2-Butoxyethanol	111-76-2	1993-04-24

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

	CAS No.	Revision Date
2-Butoxyethanol	111-76-2	1993-04-24
Distillates Petroleum	64742-47-8	1989-08-11

Pennsylvania Right To Know Components

	CAS No.	Revision Date
2-Butoxyethanol	111-76-2	1993-04-24
Distillates Petroleum	64742-47-8	1989-08-11

New Jersey Right To Know Components

	CAS No.	Revision Date
2-Butoxyethanol	111-76-2	1993-04-24
Distillates Petroleum	64742-47-8	1989-08-11

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

	CAS No.	Revision Date
Distillates Petroleum	64742-47-8	1989-08-11

16. OTHER INFORMATION

Date revised: 2015-08-26

Date Printed: 2016-08-26

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. BECAUSE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL, WE ASSUME NO RESPONSIBILITY FOR ITS USE.

Revision 0