
SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

COMMERCIAL DESIGNATION:	Berkebile 2+2[®] Starting Fluid Stock Number(s): B200
MANUFACTURER'S NAME:	The Berkebile Oil Company, Inc.
ADDRESS:	PO Box 715, Somerset, PA 15501-0715
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REVISION DATE:	December 12, 2013
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2. HAZARDOUS IDENTIFICATION**USE OF THE SUBSTANCE/MIXTURE: FUEL ADDITIVE**

FLAMMABLE AEROSOL 1
PRESSURIZED COMPRESSED GAS
ACUTE TOXICITY 4 (ORAL)
SKIN IRRITATION 2
CARCINOGENICITY 0
REPRODUCTIVE TOXICITY 0
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) 3
ASPIRATION HAZARD 1

SIGNALWORD (GHS-US): DANGER**HAZARD STATEMENT (GHS-US):**

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Harmful if swallowed. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

PRECAUTIONARY STATEMENTS (GHS-US):

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks, open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurize container. Do not pierce or burn, even after use. Avoid breathing dust/fumes/gas/mist/vapors/spray. Wash hands

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 if exposed or concerned, get medical advice/attention. If swallowed, immediately call poison center or doctor/physician. Do **NOT** induce vomiting. Rinse mouth. If on skin – wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.

Take off contaminated clothing and wash it before reuse. If inhaled, remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C (122° F). Dispose of contents and containers in accordance with all local, regional, national, and regulations.

OTHER HAZARDS:

No additional information available

71% of the mixture consists of ingredient(s) of unknown acute toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

NAME	CAS NUMBER	%	GH-US CLASSIFICATION
Heptane branched cyclic and linear	426260-76-6	60-100	Flam Liq 2 Skin Irrit. 2 STOTSE 3 Asp. Tox. 1
n-Heptane	142-82-5	1-5	Flam. Liq 2 Skin Irrit. 2 STOTSE 3
Ethylether	60-29-7	10-30	Flam. Liq. 1 Acute Tox 4 (Oral) STOTSE 3
Ethyl alcohol	64-17-5	0.5 – 1.5	Carc. 1A

4. FIRST AID MEASURES**INHALATION**

If breathing is difficult, remove victim to fresh air and keep at rest in position comfortable for breathing. Call a POISON CENTER/ doctor/physician if you feel unwell.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.

INGESTION

If swallowed, do **NOT** induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Immediately call a POISON CENTER or doctor/physician.

MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED.**AFTER INHALATION**

Vapor may cause drowsiness and dizziness.

AFTER SKIN CONTACT

Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

AFTER EYE CONTACT

May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

AFTER INGESTION

Harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

5. FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA****Suitable Extinguishing media**

Treat for surrounding material.

Special hazards arising from the substance or mixture**Fire Hazard**

Products of combustion may include, and are not limited to oxides of carbon. Extremely flammable aerosol.

Explosion Hazard

Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Advice for fire fighters**Fire Fighting Instructions**

Cool closed containers exposed to fire with water.

Protection during firefighting

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel**Protective equipment**

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

For emergency responders

No additional information available.

Methods and material for containment and cleaning up.**For Containment**

Eliminate sources of ignition. Contain and/or absorb spill with inert material (e.g. sand, vermiculite) then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning up

Scoop up material and place in a disposal container. Vapors may be heavier than air and may travel along the ground to a distant ignitions source and flash back. Provide ventilation.

Reference to other sections

See Section 8 for further information of protective clothing and equipment and Section 13 for advice on waste disposal.

7. HANDLING AND STORAGE**Precautions for Safe Handling**

Avoid contact with skin and eyes. Avoid breathing vapor or mist. Do not swallow. When using.

DO NOT eat, drink or smoke. Do not spray on an open flame or other ignition source. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Keep away from sources of ignition-
No Smoking. Pressurized container. Do not pierce or burn even after use.

Hygiene Measures

Wash hands before eating, drinking or smoking. Launder contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities.

Technical measures

Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions

Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50° C/ 122° F. Store away from direct sunlight or other heat sources.

Storage Area

Store in a well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	2000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

Ethylether (60-29-7)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1200 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Exposure Controls**Appropriate engineering controls**

Use ventilation adequate to keep exposures (airborn levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand Protection

Wear chemically resistant protective gloves.

Eye Protection

Safety glasses or goggles are recommended when using product.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

ANIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators selection must be based on known or anticipated exposure levels. The hazards of the product and the safe working limits of the selected respirator.

Environmental Exposure Controls

Maintain levels below community environmental protection thresholds.

Other Information

Do not eat, smoke or drink where materials handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Gas/Pressurized Liquid
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available
Relative evaporation rate (butylacetate=1):	No data available
Melting Point:	No data available
Freezing Point:	No data available
Flash Point:	No data available
Self-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	Flammable Aerosol
Vapor Pressure:	No data available
Relative vapor density at 20°C:	No data available
Relative density:	0.7026
Solubility:	No data available
Low Pow:	No data available

Low Kow	No data available
Viscosity, kinematic:	1.423 cSt
Viscosity, dynamic:	1 cP
Explosive properties:	No data available
Oxidizing Properties:	No data available
Explosive limits:	No data available

OTHER INFORMATION – Flame projection = 120 cm

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical Stability

Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to Avoid

Heat, incompatible materials. Sources of ignition.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

May include, and are not limited to oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information toxicological effects:

ACUTE TOXICITY	HARMFUL IF SWALLOWED
n-Heptane (142-82-5)	
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat (mg/l)	103 g/m ³ /4h
Ethyl ether (60-29-7)	
LD50 oral/rat	1215 mg/kg
LD dermal rabbit	>20 ml/kg

ACUTE TOXICITY

HARMFUL IF SWALLOWED

Ethyl alcohol (64-17-5)	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (mg/l)	124.7 mg l/4h

ATE (oral)	LD50 1275 mg/kg.rat
ATE (dermal)	LD50 >2000 mg/kg, rabbit
ATE (inhalation)	LC50>5 mg/1/4h, rat

Skin corrosion/Irritation	Causes skin irritation
Serious eye damage/Irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:	Based on available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on available data, the classification criteria are not met.
Carcinogenicity:	None
Reproductive Toxicity:	None
Specific target organ toxicity: (single exposure)	May cause drowsiness or dizziness.
Specific target organ toxicity: (repeated exposure)	Based on available data, the classification criteria are not met.
Aspiration hazard:	May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation:	Vapors may cause drowsiness and dizziness.
Symptoms/injuries after skin contact:	Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact:	May cause eye irritation, symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

SYMPTOMS / INJURIES AFTER INGESTION

Harmful if swallowed. May cause stomach distress, nausea or vomiting. May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis.

**12. ECOLOGICAL INFORMATION
TOXICITY**

Ecology-general

May cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Not established.

Bio-accumulative potential

Not established.

Mobility in soil

No additional information available.

Other adverse effects

No additional information available.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Recommendations**

This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional Information

Flammable vapors may accumulate in the container. Do not incinerate empty containers.

14. TRANSPORT INFORMATION**UN NUMBER**

DOT NA NUMBER: UN1950

UN PROPER SHIPPING NAME

Aerosols, flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity).

Hazard labels (DOT)

2.1 Flammable gases.

Other Information

No supplementary information available.

Special transport precautions

Do not handle until all safety precautions have been read and understood.

15. US FEDERAL REGULATIONS**Heptane, branched, cyclic and linear (426260-76-6)**

Listed on the United States TSCA (Toxic Substances Control Act) Inventory.

US Federal Regulations continued**n-Heptane (142-82-5)**

Listed on the United States TSCA (Toxic Substances Control Act) Inventory

EPA TSCA Regulatory Flag

T-T indicates a substance that is the subject of Section 4 test rule under TSCA.

EPATSCA Regulatory Flag:

T.T.-indicates a substance that is the subject of a Section 4 test rule under TSCA.

Ethyl ether (60-29-7)

Listed on the United States TSCA

EPATSCA Regulatory Flag:

T.T. – indicates a substance that is the subject of a Section 4 test rule under TSCA.

Ethyl Alcohol (64-17-5)

Listed on the United States TSCA (Toxic Substances Control Act) Inventory.

16. OTHER INFORMATION

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from the sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. **The Berkebile Oil Company, Inc. makes no warranty of any kind, express or implied, concerning the accuracy or completeness of the information and data herein. The Berkebile Oil Company, Inc. will not be liable for claims relating to any party's use of or reliance on information and data contained herein, regardless of whether it is claimed that the information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.**