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# SAFETY DATA SHEET

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## **1. Product Identifier**

Product form                      Substance  
Trade name                        Fuel Injector Cleaner  
Product Number(s)                B202

**Relevant Uses**                      Fuel Injector Cleaner`  
Uses of Mixture:

## **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**

GHS Classifications:

Physical, Flammable Liquids, 4  
Health, Acute toxicity, 4 Oral  
Health, Acute toxicity, 4 Dermal  
Health, Acute toxicity, 4 Inhalation  
Health, Specific target organ toxicity - Single exposure, 3  
Health, Carcinogenicity, 2  
Health, Aspiration hazard, 1  
Health, Skin corrosion/irritation, 2 C  
Environmental, Hazards to the aquatic environment - Chronic, 2

**2.2 Label Elements****Signal Word (GHS-US)****Danger****Hazard Statements (GHS-US)**

Flammable liquid and vapor  
Harmful if swallowed, in contact with skin, or inhaled  
Causes severe skin burns and eye damage  
May be fatal if swallowed and enters airway  
Suspected of causing cancer  
May cause respiratory irritation  
Toxic to aquatic life with long lasting effects.

**Precautionary Statements (GHS-US)**

Do not handle until all safety precautions have been read and met  
Keep away from heat, sparks, open flames, hot surfaces – No Smoking  
Do not breathe vapors  
Wash hands thoroughly after handling  
Use only outdoors or in a well-ventilated area  
Wear protective gloves, protective clothing, eye protection, face protection  
Do not eat, drink or smoke when using this product  
Ground/bond container and receiving equipment  
Use explosion proof electrical/ventilating/lighting equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Obtain special instructions before use.

**Response:**

If swallowed: Immediately call a doctor  
If on skin (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water/shower  
IF INHALED: Remove person to fresh air and keep comfortable for breathing  
If exposed: Call a poison center/doctor  
Rinse mouth  
DO NOT Induce Vomiting

Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage**

Store in well ventilated area. Store locked up. Keep container tightly closed. Keep Cool

**Disposal**

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

**3. Composition / Information on Ingredients**

| <b>Chemical name</b>                        | <b>Common name and synonyms</b> | <b>CAS number</b> | <b>%</b> |
|---|---------------------------------|-------------------|----------|
| Light Aromatic Solvent Naptha               | Mineral Spirits                 | 64742-95-6        | 90-99    |
| Polyolefin alkyl phenol alkyl amine         |                                 | Proprietary       | <5       |
| Benzene, 1,2,4-trimethyl-                   |                                 | 95-63-6           | <5       |
| Benzene, 1,3,5-trimethyl-                   |                                 | 108-67-8          | <5       |
| N-Propylbenzene                             |                                 | 103-65-1          | <5       |
| Xylene                                      |                                 | 1330-20-7         | <5       |
| 2-Ethyl hexanol                             |                                 | 104-76-7          | <5       |
| Benzene, 1,2,3-trimethyl-                   |                                 | 526-73-8          | <5       |
| Solvent naphtha (petroleum), heavy aromatic |                                 | 64742-94-5        | <5       |
| Cumene                                      |                                 | 98-82-8           | <5       |

**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. If not breathing give artificial respiration.  |
| First-aid measures after skin contact | : | Rinse skin with water/shower for at least 15 minutes. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if needed.   |
|                                       | : |  |

|                                      |   |
|--------------------------------------|---|
| 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 with water and drink 2-4 cups of water. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.<br>Note to Physician: Activated charcoal may be administered.  |
| 4.2 Most Important Symptoms          | : Symptoms may include: Irritation, Dermatitis, Nausea, Vomiting, Diarrhea, Breathing difficulties  |

**5. Fire-Fighting Measures**

|                                     |  |
|-------------------------------------|--|
| <b>Flammable Properties:</b>        | As defined by OSHA, this product is a Class 3A flammable liquid.<br><b>Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO<sub>2</sub>)</b>   |
| <b>Products of Combustion:</b>      | Carbon dioxide (CO <sub>2</sub> ), Carbon monoxide, Smoke, Fume, Unburned hydrocarbons   |
| <b>Explosion Hazards:</b>           | COMBUSTIBLE. - United States and Canada    FLAMMABLE. - European Union<br>VAPOR MAY CAUSE FLASH FIRE. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Containers, when exposed to heat from fire, may build pressure and rupture. Use water to cool closed containers. |
| <b>Protection of Fire-Fighters:</b> | Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye 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.  |
| <b>Further information:</b>         | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  |

**6. Accidental Release Measures**

|                              |   |
|------------------------------|---|
| <b>Personal Precautions:</b> | 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 eyes, skin, or clothing. Keep away from sources of ignition. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Handle with care and avoid spillage on the floor (slippage). Ground and bond containers when transferring material. Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

**Storage Procedures:** Keep away from sources of ignition. Keep container in a well-ventilated area. Store in a tightly closed container. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage.

## **8. Exposure Controls / Personal Protection**

### **Exposure Guidelines:**

#### **Distillates (pet), hydro-treated light**

OSHA TWA: 500 ppm

#### **Solvent naphtha (pet), me-dium aliph.**

OSHA TWA: 500 ppm

#### **1,2,4-TRIMETHYLBENZENE**

ACGIH TWA: 25 ppm

#### **1,3,5-TRIMETHYLBENZENE**

ACGIH TWA: 25 ppm

#### **XYLENE**

OSHA TWA: 100 ppm

OSHA STEL: 150 ppm

#### **CUMENE**

OSHA PEL: 50 ppm, 245 mg/m<sup>3</sup>

OSHA TWA: 50 ppm

ACGIH TWA: 50 ppm

#### **NAPHTHALENE**

OSHA PEL: 10 ppm, 50 mg/m<sup>3</sup>

OSHA TWA: 10 ppm, 50 mg/m<sup>3</sup>

OSHA STEL: 15 ppm

#### **VINYL ACETATE**

OSHA TWA: 10 ppm, 30 mg/m<sup>3</sup>

OSHA STEL: 20 ppm

#### **ETHYLBENZENE**

OSHA TWA: 100 ppm  
OSHA STEL: 125 ppm  
ACGIH STEL: 125 ppm

**Controls and Protection:** Where contact is likely, wear chemical resistant gloves, a chemical resistant suit, and boots. Additional body garments should be used based upon the task being performed.

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

**Personal Protective Equip:** Use of safety glasses and gloves are recommended.

**Eye/face Protection:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles. Use appropriate respiratory protection if there is the potential to exceed the exposure limit(s).

**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.

**Hand Protection:** Wear chemical resistant gloves. Nitrile gloves of minimum thickness 0.4 mm have an expected breakthrough time of 30 minutes or less when in frequent contact with the product. Due to variable exposure conditions the user must consider that the practical use of a chemical-protective glove in practice may be much shorter than the permeation time above. Manufacturer's directions for use, especially about the minimum thickness and the minimum breakthrough time, must be observed. This information does not replace suitability tests by the end user since glove protection varies depending on the conditions under which the product is used.

## **9. Physical and Chemical Properties**

|   |   |  |
|---|---|--|
| Appearance                                  | : | liquid   |
| Colour                                      | : | transparent, clear                             |
| Odour                                       | : | characteristic, hydrocarbon-like, solvent-like |
| Odour Threshold                             | : | No data available                              |
| pH  | : | not applicable                                 |
| Freezing Point (Melting point/range)        | : | < -70 °C (< -94 °F)                            |
| Boiling Point (Boiling point/boiling range) | : | 179 - 213.9 °C (354 - 417.0 °F)                |
| Flash point                                 | : | 61 - 66 °C (142 - 151 °F)                      |
| Evaporation rate                            | : | 0.04   |
| Flammability (solid, gas)                   | : | No data available                              |
| Burning rate                                | : | No data available                              |
| Upper explosion limit                       | : | 6.0 - 7.0 %(V)                                 |
| Lower explosion limit                       | : | 0.7 - 0.8 %(V)                                 |
| Vapour pressure                             | : | 0.32 - 0.5 mmHg @ 20 °C (68 °F)                |
| Relative vapour density                     | : | > 1AIR=1                                       |

|                           |   |  |                                  |
|---------------------------|---|--|----------------------------------|
| Relative density          | : | 0.78 - 0.81                            | Reference substance: (water = 1) |
| Density                   | : | 0.780 - 0.803 g/cm <sup>3</sup>        | @15 - 15.5 °C (59 - 59.9°F)      |
| Bulk density              | : | No data available                      |                                  |
| Auto-ignition temperature | : | 233 - 315 °C                           |                                  |
| Viscosity, kinematic      | : | 1.8 mm <sup>2</sup> /s @ 20 °C (68 °F) |                                  |

### **10. Stability and Reactivity**

**Stability:** Product is stable under normal conditions.  
**Conditions to Avoid:** High temperatures above 50 C (122 F) and open flame.  
**Materials to Avoid:** May burn or react violently to flourine/oxygen mixtures.  
**Possibility of Hazardous Reaction:** Vapors may form explosive mixture in the air

### **11. Toxicological Information**

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

Repeated skin contact with this product may cause dermatitis or an oil acne.

No component is listed as a carcinogen, mutagen, or teratogen.

#### **SKIN EFFECTS:**

Solvent Petroleum Naphtha, no deaths reported at 4 ml/kg (Rat). Slightly irritating (rabbit, 4 hour(s)).

Vinyl Acetate Monomer, Skin absorption LD50 is 2,335 mg/kg in rabbits.

#### **ACUTE ORAL EFFECTS:**

Solvent Petroleum Naphtha, LD50, 10 ml/kg in rats.

Oral LD 50 for Vinyl Acetate Monomer is 2,920 mg/kg in rats.

#### **ACUTE INHALATION EFFECTS:**

Solvent Petroleum Naphtha, no deaths at 710 ppm (v) (Rat) 4 Hour (s).

Vinyl Acetate Monomer, four hour inhalation LC50 is 4,000 ppm in rats. This product contains components which may be persistent in the environment.

### **12. Ecological Information**

Avoid exposing to the environment. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Based on calculation

### **13. Disposal Considerations**

Dispose of in accordance with local regulations.

Do not flush to surface water or drains

### **14. Transport Information**

**IATA (International Air Transport Association):** Not regulated as a dangerous good

**IMDG-Code:** Not regulated as a dangerous good

**DOT (Department of Transportation):** UN1268, PETROLEUM DISTILLATES, N.O.S., CBL, III

The flash point for this material is greater than 100 F (38

**Special Notes:**

C). Therefore, in accordance with 49 CFR 173.150(f) non-bulk containers (<450L or <119 gallon capacity) of this material may be shipped as non-regulated when transported solely by land, as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

**15. Regulatory Information**

**OSHA Hazards** : Combustible Liquid, Toxic by inhalation., Harmful by ingestion., Harmful by skin absorption., Moderate skin irritant, Aspiration hazard

**WHMIS Classification** : B3: Combustible Liquid  
D2B: Toxic Material Causing Other Toxic Effects

**REGULATORY DISCLOSURES:****New Jersey Right to Know list:**

1,2,4-Trimethylbenzene, CAS #95-63-6, < 5 - 15%.  
1,3,5-Trimethylbenzene, CAS # 108-67-8, < 5 %.  
Cumene, CAS # 98-82-8, < 0.5%.  
Xylene, CAS # 1330-20-7, < 0.5 %.  
Naphthalene, CAS# 91-20-3, < 0.5 %.

**Pennsylvania Right to Know List:**

1,2,4-Trimethylbenzene, CAS #95-63-6, < 5 - 15%.  
1,3,5-Trimethylbenzene, CAS # 108-67-8, < 5 %.  
Cumene, CAS # 98-82-8, < 0.5%.  
Xylene, CAS # 1330-20-7, < 0.5 %.  
Naphthalene, CAS# 91-20-3, < 0.5 %.

**Canadian Disclosure List**

1,2,4-TRIMETHYLBENZENE (95-63-6)  
1,3,5-TRIMETHYLBENZENE (108-67-8)  
CUMENE (98-82-8)  
ETHYLBENZENE (100-41-4)

**SARA Title III - Section 313**

1,2,4-TRIMETHYLBENZENE (95-63-6)  
XYLENE (1330-20-7)  
CUMENE (98-82-8)  
NAPHTHALENE (91-20-3)  
VINYL ACETATE (108-05-4)  
ETHYLBENZENE (100-41-4)

**CERCLA Hazardous Substances**

XYLENE (1330-20-7) -- RQ 1000 lb  
CUMENE (98-82-8) -- RQ 5000 lb  
NAPHTHALENE (91-20-3) -- RQ 100 lb  
VINYL ACETATE (108-05-4) -- RQ 5000 lb  
ETHYLBENZENE (100-41-4) -- RQ 1000 lb

**RCRA Hazardous Substances**

XYLENE (1330-20-7) -- RCRA Code: U239  
CUMENE (98-82-8) -- RCRA Code: U055  
NAPHTHALENE (91-20-3) -- RCRA Code: U165

**Clean Air Act - Section 112**



**B202**

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VINYL ACETATE (108-05-4)

**Title V**

1,2,4-TRIMETHYLBENZENE (95-63-6)

XYLENE (1330-20-7)

CUMENE (98-82-8)

NAPHTHALENE (91-20-3)

VINYL ACETATE (108-05-4)

ETHYLBENZENE (100-41-4)

**SC Toxic Air Pollutants List**

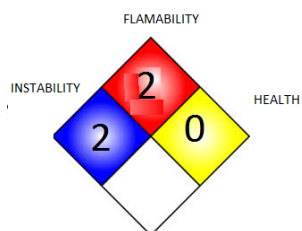
XYLENE (1330-20-7)

CUMENE (98-82-8)

NAPHTHALENE (91-20-3)

VINYL ACETATE (108-05-4)

ETHYLBENZENE (100-41-4)

**NFPA:****HMIS III:**

|                         |          |
|-------------------------|----------|
| <b>HEALTH</b>           | <b>2</b> |
| <b>FLAMABILITY</b>      | <b>2</b> |
| <b>PHYSICAL HAZZARD</b> | <b>0</b> |

Prepared By: Zach Sherbine

Berkebile Oil #: B202

Revision Date: 05/08/2015

Changes since last revision: All

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