SAFETY DATA SHEET

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

Chemtrec Emergency Tel # 800-424-9300 **Emergency Contact**

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS Classifications:

Fax: 814-443-2873

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)
Hazzard Statements (GHS-US)

Danger

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

Flammable liquid and vapor

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

Chemical name	Common name a	nd synonyms	CAS number	%
Light Aromatic Solvent Napth	na Mi	neral 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).

inhalation

First-aid measures after

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.

:

PAGE 4 OF 9 PAGES

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.

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

Flammable Properties: As defined by OSHA, this product is a Class 3A flammable liquid.

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO2)

Products of Combustion: Carbon dioxide (CO2), Carbon monoxide, Smoke, Fume, Unburned

hydrocarbons

Explosion Hazards: COMBUSTIBLE. - United States and Canada FLAMMABLE. - European Union

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.

Protection of Fire-Fighters: 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.

Further information: Collect contaminated fire extinguishing water sepa- rately. This must not

be discharged into drains.

Fire residues and contaminated fire extinguishing wa- ter must be

disposed of in accordance with local regu-lations.

6. Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Telephone: 814-443-1656 Page 4 1216 Red Brant Rd., PO Box 715
Fax: 814-443-2873 Somerset, PA 15501-0715

PAGE 5 OF 9 PAGES

B202

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 Prodedures: 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/m³

OSHA TWA: 50 ppm ACGIH TWA: 50 ppm **NAPHTHALENE**

OSHA PEL: 10 ppm, 50 mg/m³ OSHA TWA: 10 ppm, 50 mg/m³

OSHA STEL: 15 ppm **VINYL ACETATE**

OSHA TWA: 10 ppm, 30 mg/m³

Telephone: 814-443-1656

OSHA STEL: 20 ppm **ETHYLBENZENE**

Fax: 814-443-2873

Page 5 1216 Red Brant Rd., PO Box 715 Somerset, PA 15501-0715

PAGE 6 OF 9 PAGES

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 glassses 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) : $179 - 213.9 \,^{\circ}\text{C} \, (354 - 417.0 \,^{\circ}\text{F})$ Flash point : $61 - 66 \,^{\circ}\text{C} \, (142 - 151 \,^{\circ}\text{F})$

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 : $0.32 - 0.5 \text{ mmHg} @ 20 ^{\circ}\text{C} (68 ^{\circ}\text{F})$

Relative vapour density : > 1AIR=1

Telephone: 814-443-1656 Page 6 1216 Red Brant Rd., PO Box 715 Fax: 814-443-2873 Somerset, PA 15501-0715

PAGE 7 OF 9 PAGES

B202

Relative density : 0.78 - 0.81Reference substance: (water = 1)

Density : 0.780 - 0.803 g/cm3@15 - 15.5 °C (59 - 59.9°F)

Bulk density : No data available Auto-ignition temperature : 233 - 315 °C

Viscosity, kinematic : 1.8 mm2/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

UN1268, PETROLEUM DISTILLATES, N.O.S., CBL, III

Transportation):

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

Telephone: 814-443-1656 Page 7 1216 Red Brant Rd., PO Box 715 Fax: 814-443-2873 Somerset, PA 15501-0715

PAGE 8 OF 9 PAGES

B202

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

Telephone: 814-443-1656 Page 8 1216 Red Brant Rd., PO Box 715 Fax: 814-443-2873 Somerset, PA 15501-0715

PAGE 9 OF 9 PAGES

B202

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:

HEALTH	2
FLAMABALITY	2
PHYSICAL HAZZARD	0

Prepared By: Zach Sherbine

Berkebile Oil #: B202

Revision Date: 05/08/2015 Changes since last revision: All

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of Berkebile Oil's knowledge or obtained from sources believed by Berkebile Oil to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or Berkebile Oil Company.