
MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Fuel Injector Cleaner HMIS Codes: HRFP

230

PRODUCT CODE: L-08468

SECTION I - DISTRIBUTOR IDENTIFICATION

DISTRIBUTOR NAME: NAPA Echlin PRODUCT LABEL NO.: 2-18469

ADDRESS: Branford, CT 06405

DATE PREPARED: 04/04/97 INFORMATION PHONE: 814-443-1656

or CHEMTREC 800-424-9300

REASON REVISED: New NAME OF PREPARER: SPB

DATE REVIEWED: 03/12/97

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

OCCUPATIONAL

EXPOSURE LIMITS WEIGHT

HAZARDOUS COMPONENTS CAS NUMBER OSHA PEL ACGIH TLV PERCENT

1.Heptane 64742-49-0 TWA of 400 ppm TWA 400 ppm 30-50% 2.Butyl Cellosolve 111-76-2 TWA of 25 ppm TWA 25 ppm 5-15% 3.Aromatic 100 64742-95-6 TWA of 25 ppm TWA 25 ppm 15-30%

4.Oleic Acid 112-80-1 NONE NONE 1-5%

5.Morpholine 110-91-8 TWA of 20 ppm TWA 20 ppm 1-5% 6.Lubrizol 8293 not applicable TWA of 100 ppm TWA 20 ppM 5-15%

NFPA CODES: Health1; Fire 3; Reactivity 0.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: Not determined SPECIFIC GRAVITY: 0.08 at 59

VAPOR DENSITY: at 1 atm. (Air=1):3.5 EVAPORATION RATE: 5.5 Approx.

SOLUBILITY IN WATER: % at Deg. F; Less than 0.01 at 77 APPEARANCE & ODOR: N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

NOTE THIS DATA IS BASED ON HEPTANE WHICH IS THE MAIN INGREDIENT IN THIS FUEL INJECTOR CLEANER

FLASH POINT: 19 deg F NOTE: Approx.

AUTOIGNITION TEMPERATURE: 495 deg F NOTE: Approx.

^{*}Please note that the chemical identity of some or all of the above hazardous ingredients is confidential business information and is being withheld as permitted by 29 CFR 1910.1200 and various State Right to Know Laws.

FLAMMABLE LIMITS IN AIR BY VOLUME: Lower 1.9%; Upper 11.6% NOTE: Approx.

SPECIAL FIREFIGHTING PROCEDURES: Use water to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemicals. Try to cover liquid spills with foam. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignite sources where they may ignite or explode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely Flammable, material will readily ignite at ambient temperatures. Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

DECOMPOSITION PRODUCTS UNDER FIRE CONDTIONS: No unusual.

SECTION V - REACTIVITY DATA

STABILITY - Stable

CONDTIONS TO AVOID: N/AP

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSTION OR BY-PRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

The health effects noted below are consistent with requirements under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: High vapor/aerosol concentrations (greater than approximately 1000 pp,) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Skin-Low order to toxicity. Frequent or prolonged contact may cause irritation and dermatitis. Eyes-Slightly irritating but does not injure eye tissue.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Low order of toxicity. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

EMERGENCY AND FIRST AID PROCEDURE: Inhalation-Using proper respiratory protections immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention. Flush skin with large amounts of water, use soap if available. Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention. Ingestion-If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

ELECTROSTATIC ACCUMULATION HAZARD: Yes, use proper grounding procedure.

STORAGE TEMPERATURE, DEG F: Ambient

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed. Handle and open container with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other source of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

LOADING/UNLOADING TEMPERATURE, DEG. F: Ambient

STORAGE TRANSPORTATION PRESSURE, MMHG: Atmospheric

LOADING/UNLOADING VISCOSITY, cST: 0.6

SECTION VII - CONTROL MEASURES

EXPOSURE CONTROLS: The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated. Use explosion proof ventilation equipment.

PERSONAL PROTECTION: For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. Where contact may occur, wear safety glasses with side shields. Where concentrations in air may exceed the limits given this Section and engineering work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

LAND SPILL: Eliminate source of ignition. Prevent additional discharge of material if possible to do so without hazard. For small sills implement cleanup procedures; for large spills implement procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting, See Section 9, notify the National Response Center. Prevent liquid from entering sewers, waterways, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL: Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION IX - REGULATORY INFORMATION

TSCA: All of the components of this material are on the US TSCA Inventory.

CERCLA SECTION 304 HAZARDOUS SUBSTANCE ("RQ" CHEMICALS): If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act. We recommend you contact local authorities to determine if there may be other local requirements.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III SECTION 313: Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazardous categories: Delayed Health, Fire This information may be subject to the provisions of the Community Right-to-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met. This product contains the following Section 313

Reportable Ingredients:

	CAS #	Max	%	
1,2,4-Trimethlk	enzene	95-63	-6	9.81
Xylene	1330-2	20-7	0.9	
Cumene	98-82	2-8	0.45	
Ethylbenzene	100)-41-4	0.1	15
Glycol Ethers	none	е	15	
Heptane	64742	2-49-0	50	

SECTION X - DISCLAIMER

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 of completeness of the information and data herein. The Berkebile Oil Company, Inc. will not be liable for claims relating to any party's us of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading. This information relates to the material designated and may not be valid for such materials used in combination with any other materials nor in any process.