



MATERIAL SAFETY DATA SHEET

ZAK FUEL INJECTOR CLEANER

PRODUCT CODE: F600

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ZAK Fuel Injector Cleaner
Chemical Family: Petroleum Distillate
Synonyms: None
Supplier: ZAK Products, 720 Industrial Blvd. #400, Grapevine, TX, 76051
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300
Information Telephone: ZAK Products 1-800-514-6011 During normal business hours CST 817-645-6088

Revision Date: 08/13/2003
Date Printed: 05/58/2003

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Distillates (Petroleum Straight Run Middle) 64741-44-2	90-100	None Established	None Established	None Established	None Established
Solvent naptha (petroleum), light aromatic 64742-95-6	.1-10	None Established	None Established	None Established	None Established

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! May cause delayed lung injury. Combustible Liquid and Vapor. Exposure to vapors can cause central nervous system depression, drowsiness, weakness, headache, dizziness, and nausea. Harmful if inhaled. Avoid breathing vapors. Avoid contact with skin and eyes. Keep away from heat, sparks, and flame.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Ingestion: If swallowed, do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. If victim is conscious and alert, give 1-2 glasses of water to drink. If vomiting occurs, keep head lower than hips to prevent aspiration.
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Skin Contact: Remove contaminated clothing and shoes, and launder before reuse. Wash with soap and water. If irritation or rash develops, obtain medical assistance.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): >155 F
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): .7 vol %
Flammable Limits in Air - Upper (%): 6 vol %
Autoignition Temperature °F(°C): >550 F
Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam. Use water spray to keep containers cool that are exposed to heat or flames. Water stream may spread fire.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Oxides of Carbon. Fumes and Smoke. Oxides of Nitrogen.
Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Sweep or scrape up material and place in a suitable clean, dry container for disposal by approved methods. Remove sources of ignition. Increase area ventilation. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers.
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

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7. HANDLING AND STORAGE

Handling and Storage: Keep containers tightly closed when not in use. Keep away from heat and open flame. Wash thoroughly after handling. Use only with adequate ventilation. Avoid extreme temperatures. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation. Showers. Eyewash stations.
Eyes: Wear safety glasses or goggles to protect against exposure. Chemical goggles; also wear a face shield if splashing hazard exists.
Skin Protection: Nitrile coated apron or clothing. Neoprene coated apron or clothing. Avoid skin contact. Wear protective clothing and gloves.
Respiratory Protection: Use an approved NIOSH organic vapor respirator below the TLV. If TLV is exceeded or overexposure is likely, use positive pressure or self contained breathing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to light yellow liquid
Odor: KEROSENE **pH Value:** Not Determined
Vapor Pressure: .00386 psia @ 68F **Vapor Density (Air=1):** 6
Boiling Point (°F): >400F **Melting/Freezing Point:** 25F
Solubility in Water: NEGLIGIBLE **Bulk Density at 20°C:** Not Determined
Molecular Weight: Mixture **Evaporation Rate:** Not Determined
Viscosity: >1.7 cst @ 40C **Specific Gravity (H20=1):** .79 @ 70F
VOC Content(%): Not Determined **Decomposition Temperature:** Not Known

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of handling, use and transportation.
Conditions to Avoid: Keep away from heat, sparks and flame. Do not expose to heat or store at temperatures above 120 F.
Materials to Avoid: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide and other asphixiates.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Distillates (Petroleum Straight Run Middle) 64741-44-2	90-100	Inhalation	Rats	1700 mg/m3/4H
Solvent naptha (petroleum), light aromatic 64742-95-6	.1-10	Oral	Rats	LD50 8400 mg/kg

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Distillates (Petroleum Straight Run Middle) 64741-44-2	90-100	Not Listed	Not Listed	Not Listed
Solvent naptha (petroleum), light aromatic 64742-95-6	.1-10	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

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13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.

Waste Management: Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.
Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:
Proper Shipping Name: Consumer Commodity
Hazard Class: ORMD
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:
Proper Shipping Name: Combustible Liquid, nos
Hazard Class: 3
Hazard Subclass: Not Determined
UN No.: 1993
Packing Group: III
Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Distillates (Petroleum Straight Run Middle) 64741-44-2	90-100	Not Listed	Not Listed	Not Listed	Not Listed
Solvent naphtha (petroleum), light aromatic 64742-95-6	.1-10	Not Listed	Not Listed	NA	NA

SARA 311/312 Hazard Categories: Immediate/Acute, Delayed/Chronic, Fire

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Distillates (Petroleum Straight Run Middle) 64741-44-2	90-100	Not Listed	Not Listed	Not Listed	Not Listed
Solvent naphtha (petroleum), light aromatic 64742-95-6	.1-10	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA: The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

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