

SECTION I

IDENTIFICATION

AFD-6800

October 15, 2004

MANUFACTURER/DISTRIBUTOR

AFD Technologies
375 Fentress Blvd. Suite 100
Daytona Beach, FL 32114

H	2	
F	2	
R	3	
PE	B	

PHONE NUMBERS

Product Information (386) 248-3283
Medical Emergency (800) 424-9300 [Inside U.S.]
(703) 527-3887 [Outside U.S.]

CHEMICAL FAMILY

Diesel Cetane Improver

SECTION II – HAZARDOUS INGREDIENTS

CHEMICAL NAMES

CAS NUMBER

EXPOSURE LIMITS

2-Ethylhexyl Nitrate	27247-96-7	1 ppm TWA8 (Manufacturer AEL*)
2-Ethylhexyl alcohol	104-76-7	20 ppm TWA8 (Manufacturer AEL*)

*Acceptable Exposure Limit recommended by manufacturer.

SECTION III – PHYSICAL DATA

BOILING RANGE	200°F+	SPECIFIC GRAVITY (WATER = 1)	0.967
VAPOR PRESSURE	0.035 mm Hg @ 20°C	PERCENT VOLATILES BY VOLUME	>98%
		PERCENT SOLIDS BY VOLUME	n.a.
VAPOR DENSITY	>1 (Air = 1)	EVAPORATION RATE	<1 (Butyl Acetate = 1)
WATER SOLUBILITY	0.02 Wt%	pH	n/a
APPEARANCE	Light Straw Liquid	ODOR	Pungent

SECTION IV – FIRE/EXPLOSION HAZARDS

FLASHPOINT (T.C.C.) 174°F FLAMMABILITY LIMITS: LEL: 0.25% in air; UEL: n/a;

EXTINGUISHING MEDIA – Water spray, Carbon dioxide (CO₂), dry chemical, foam or other National Fire Protection Association (NFPA) approved method for treating a Class B fire.

SPECIAL FIRE FIGHTING PROCEDURES - Summon professional firefighters. Use full protective equipment including self-contained breathing apparatus. Water spray may be ineffective. If water is used, fog nozzles are preferable. If exposed to fire or extreme heat, water should be used to cool closed containers and prevent pressure build-up or possible auto-ignition.

UNUSUAL FIRE AND EXPLOSION HAZARDS - Keep containers tightly closed. Isolate from heat and flame. Due to pressure build-up, closed containers exposed to extreme heat may explode. Never use a welding or cutting torch on or near container (even empty) as product or its residue may ignite. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SECTION V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV)	See Section II
PERMISSIBLE EXPOSURE LIMIT (PEL)	See Section II
OTHER LIMITS	See Section II

EFFECTS OF OVER EXPOSURE:

ACUTE: **Breathing** - Irritation of the respiratory tract; headache, nausea dizziness, weakness and fatigue. Extreme exposure can result in unconsciousness and even respiratory arrest. **Eye Contact** - Eye irritant. **Skin Contact** - Prolonged and repeated skin contact may cause defatting and dermatitis. **Swallowing** - Vomiting may result. Pulmonary aspiration hazard if vomiting occurs.

CHRONIC: Reports have associated repeated and prolonged occupational overexposure to hydrocarbon solvents with permanent brain and nervous system damage.

PRIMARY ROUTES OF ENTRY - Inhalation, skin contact, and swallowing.

EMERGENCY AND FIRST AID PROCEDURES: **IF BREATHED** - If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, summon medical assistance immediately. If breathing ceases, restore using approved CPR techniques and summon medical assistance immediately. **IF IN EYES** - Flush immediately with large amounts of water for at least 15 minutes. Get medical assistance if irritation persists. **IF ON SKIN** - Wash affected area with soap and water. Remove soiled clothing. Get medical assistance if irritation persists. Wash clothing before reuse. **IF SWALLOWED** – Give 2 glasses of water and induce vomiting. **NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CONSULT A PHYSICIAN IMMEDIATELY.**

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE - None when used in accordance with the Special Protection Information (Section VIII).

WARNING: Misuse by deliberately concentrating and inhaling the vapor from the contents may be harmful or fatal.

SECTION VI – REACTION DATA

STABILITY - Product is stable at normal temperatures. CONDITIONS TO AVOID - Heat, sparks, & flames.

INCOMPATIBILITY (MATERIALS TO AVOID) - Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS – Decomposes above 100°C yielding hazardous vapors, including oxides of nitrogen and carbon monoxide.

HAZARDOUS POLYMERIZATION - Will not occur.

SECTION VII – SPILL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED - Remove all sources of ignition (flames, hot surfaces, and electrical, static or frictional sparks). Do not smoke. Prevent breathing of vapors. Ventilate area. Before attempting to clean up, refer to hazard caution information in other sections of this material safety data sheet. Dike and contain spilled material and remove with inert absorbent and non-sparking tools. Store in closed container until product can be properly disposed of. Dispose of in accordance with local, state and federal regulations. Incinerate only in an approved facility. Do not incinerate closed containers.

CERCLA (SUPERFUND) REPORTABLE QUANTITY (in lbs.) - Refer to Section 311 of The Clean Water Act.

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

SECTION VIII – SPECIAL PRECAUTIONS

RESPIRATORY PROTECTION - When used in restricted ventilation areas, wear NIOSH/MDHS approved chemical/mechanical filters designed to remove a combination of particulates and vapor. When used in confined areas, wear NIOSH/MSHA approved air supply respirators or hoods. Follow respirator manufacturer's directions for respirator use. If respirators are used, a program should be established to assure compliance with OSHA Standard 29 CFR 1910.134. Use product only with adequate ventilation. Use either local exhaust or mechanical means to meet TLV requirements. Ventilation must be sufficient to limit employee exposure at, or below applicable health and safety standards. Heavy solvent vapors should be removed from lower levels of work areas.

PROTECTIVE EQUIPMENT - Neoprene or equivalent gloves; chemical goggles; solvent impermeable clothing should be worn if contact is likely; maintain ready access to eye bath and safety shower.

HANDLING AND STORAGE PRECAUTIONS - Keep away from heat, flame and sparks. Do not smoke. Prevent build-up of vapors by maintaining continuous flow of fresh air. Do not store above 120°F or near fire or open flame. Store large quantities in buildings to comply with OSHA 1910.106. Keep container closed when not in use. Do not transfer contents to unlabelled containers. Do not reuse empty containers. Keep out of reach of children.

SECTION IX – DOT SHIPPING INFORMATION

SHIPPING NAME – Combustible Liquid, n.o.s. (contains 2-Ethylhexyl Nitrate), UN/NA 1993, III.
FOR OCEAN SHIPMENTS: Marine Pollutant (Contains 2-Ethylhexyl Nitrate).
