



701 South Howard Avenue
STE 106-352
Tampa, Florida 33606 U.S.A.
E-MAIL: dbenginearmour@hotmail.com

ENGINE ARMOUR
THE BEST FOR LESS

Telephone: (813) 767-9624 FAX: (813) 254-0950

MATERIAL SAFETY DATA SHEETS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

GENERIC NAME: Engine Oil Booster

ISSUE DATE: March 2006

TRADE NAMES:

1. Engine Armour® Hydraulic Oil Booster

CAS NUMBER:

Mixture

SYNONYMS / GENERAL NAMES:

Petroleum Oil; Lube Oil; Lubricant; Base Stock

24 HOUR EMERGENCY TELEPHONE:

(CHEMTREC) 1-800-424-9300

TECHNICAL INFORMATION:

813-248-1988

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	%	HAZARD DATA
Lubricating Oils	64742-58-1	> 84	Oral LD50 (rat): >15000 mg/kg Skin LD50 (rabbit): > 2000 mg/kg
Petroleum Additives	mixture	< 16	Oral LD50 (rat): >5000 mg/kg Skin LD50 (rabbit): > 2000 mg/kg

3. HAZARDOUS IDENTIFICATION

IRRITANCY:

Breathing high concentrations of vapor or mist irritate the respiratory tract. Direct contact with material may cause skin irritation.

REPRODUCTIVE EFFECTS:

High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs)

4. FIRST AID MEASURES

EYES:

Flush with large volumes of water at least 15 minutes. See physician if any complications arise.

DERMAL:

Wash with soap and water. Do not wear heavily contaminated clothing before laundering.

INGESTION:

Do NOT induce vomiting. Immediately seek medical attention.

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration. Seek medical aid.

5. FIRE FIGHTING MEASURES

FLASH POINT, °C(°F):

150°C(302°F)

EXTINGUISHING MEDIA:

Carbon Dioxide, dry chemical, regular foam, or water spray. Spattering and foaming may occur from spraying water or foam on high-flash -point liquids.

SPECIAL FIRE FIGHTING PROCEDURES:

Keep storage containers cool with water spray. Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters'

AUTOIGNITION TEMPERATURE:

ND

EXPLOSION DATA:

Material does not have explosive properties.

NFPA RATING:

HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0

6. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:

Remove all ignition sources. Stop leak if you can do it without risk. Ventilate area and avoid breathing vapor or mist. Contain away from surface waters and sewers. Contain as a liquid for possible recovery or sorb with compatible sorbent material and shovel into collapsible container for disposal.

7. HANDLING AND STORAGE

- HANDLING PROCEDURES:** Keep away from intense heat, sparks, or flame. Empty containers may contain product residue which could include flammable or explosive vapors.
- STORAGE PROCEDURES:** Do not apply heat or flame to container. Keep separate from strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:	Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits.
SKIN PROTECTION:	Where skin contact is likely, wear Neoprene, Nitrile, or equivalent gloves; use of natural rubber or equivalent gloves is not recommended.
EYE PROTECTION:	Safety goggles/glasses, or chemical splash goggles if splashing is anticipated.
RESPIRATORY PROTECTION:	Normally none required under normal conditions. If high vapor or mist concentrations expected - use respirator approved for organic vapors and mists.
CLOTHING RECOMMENDATION:	Wear appropriate chemical-resistant apron or other protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Amber (medium-orange)
ODOR:	Liquid petroleum odor
pH:	ND
VAPOR PRESSURE, mm Hg:	Less than 0.1 mm Hg at 68°F
VAPOR DENSITY:	NA
BOILING POINT, 760 mm Hg, °C:	> 650°F (343°C)
SOLUBILITY IN WATER:	Insoluble
SPECIFIC GRAVITY:	0.87 at 15.6 °C (water = 1)
EVAPORATION RATE:	ND
MOLECULAR WEIGHT:	NA

10. STABILITY AND REACTIVITY

STABILITY:	Stable at moderately elevated temperatures and pressures.
INCOMPATIBILITY:	Strong oxidizing agents.
POLYMERIZATION:	Will not occur.

11. TOXICOLOGICAL INFORMATION

EYE IRRITATION:	Not expected to cause eye irritation. Based on data from components or similar materials.
DERMAL IRRITATION:	Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
INHALATION:	No data available to indicate product or components may be a toxic inhalation hazard.
CHRONIC EXPOSURE SYMPTOMS	Prolonged or repeated skin contact may cause drying, cracking, or dermatitis.
CARCINOGENICITY:	No data available to indicate product or components contained at greater than 0.1% may cause birth defects.

12. HEALTH INFORMATION

HMS CODE: HEALTH: 1 FIRE: 1 REACTIVITY: 0

PRECAUTIONARY LABELS: This material has no known hazards

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Material, if discarded, is expected to be a hazardous waste under RCRA due to toxicity. Waste management should be in compliance with federal, state, and local laws. Determine compliance status with all applicable requirements prior to disposal.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME:	Petroleum Lubricating Oil
HAZARD CLASS:	Non-Hazardous / Not Regulated

15. REGULATORY INFORMATION**SARA SECTION 313 - TOXIC CHEMICALS:**

This product does not contain toxic chemicals under SARA Section 313 and 40 CFR Part 372.

SARA SECTION 311 - HAZARD CATEGORIES:

This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established by Sections 311 and 312 of SARA as indicated below:

Yes	IMMEDIATE (ACUTE) HEALTH HAZARD	No	SUDDEN RELEASE OF PRESSURE HAZARD
No	DELAYED (CHRONIC) HEALTH HAZARD	No	REACTIVE HAZARD
No	FIRE HAZARD		

SARA SECTION 302 - EXTREMELY HAZARDOUS WASTE:

This product is not known to contain any components in concentrations greater than one percent that are listed as Extremely Hazardous Substances in 40 CFR Part 355 pursuant to the requirements of Section 302(a) of SARA.

CLEAN WATER ACT (CWA):

Under the CWA, discharges of crude oil and petroleum products to surface water without proper Federal and State permits must be reported immediately to the National Response Center at (800) 424-8802.

CERCLA HAZARDOUS SUBSTANCES:

As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance.

U.S. TSCA INVENTORY

All components of this material are on the U.S. TSCA Inventory or are not required to be listed on the U.S. TSCA Inventory

16. OTHER INFORMATION

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. XCEL OIL COMPANY BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS.

NFPA HAZARD RATING	least - 0	slight - 1	moderate - 2	high - 3	extreme - 4
HMS HEALTH RATING	least - 0	slight - 1	moderate - 2	high - 3	extreme - 4