

MSDS Code 105

Product: zMax Diesel Engine Formula (E40) – End User

## Material Safety Data Sheet

### IDENTIFICATION

LANGUAGE: English

PRODUCT NAME(S): **zMax Diesel Engine Formula (E40)<sup>TM</sup>**

DATE OF MSDS: April 9, 2001

### SUPPLIER INFORMATION

MANUFACTURER/DISTRIBUTOR : **Oil-Chem Research Corp.**

ADDRESS: 6800 W. 73rd Street  
Bedford Park, IL, U.S.A.60638-6024

EMERGENCY TELEPHONE NO.(S): ESSENTIAL INFORMATION:

### EMERGENCY ASSISTANCE

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL CHEMTREC (800)424-9300; CHEMTREC Assist (U.S. &Canada)

For additional information please contact Mr. Edward Rachanski Jr, Technical Director at Telephone:708-728-0028; Fax 708-728-9308; 9:00 a.m. – 5:00 p.m. CST

MATERIAL SAFETY DATA

### PRODUCT IDENTIFICATION

PRODUCT NAME: **zMax Diesel Engine Formula (E40)<sup>TM</sup>**

FORMULA: UNDEFINED

DATE ISSUED: 04/09/2001

HAZARD RATING (MFR.) HEALTH= 0 FIRE= 1 REACTIVITY= 0 SPECIAL: NONE

HAZARD RATING SCALE:MINIMAL=0 SLIGHT=1 MODERATE =2 SERIOUS=3 SEVERE=4

### HAZARDOUS INGREDIENTS

EXPOSURE LIMITS, PPM

OSHA ACGIH OTHER Hazards

COMPONENT	CAS NO.	%	PEL(OIL Mist)	TLV (oil Mist) Hazard
MINERAL OIL	8042-47-5	>99	5 mg/kg	10 mg/kg

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### **PHYSICAL PROPERTIES**

BOILING POINT, Deg F: 540-610 VAPOR PRESSURE, MM Hg/20 DEG C:<1  
MELTING POINT, DEG F: N/D VAPOR DENSITY (AIR= 1): N/D FLASH POINT :270 F/132 C  
SPECIFIC GRAVITY (WATER= 1): 0.82-0.88 WATER SOLUBILITY, %: INSOLUBLE  
APPEARANCE AND ODOR: CLEAR EVAPORATION RATE (ETHYL ETHER= 1): < 1  
TRANSPARENT LIQUID, SLIGHT CHARACTERISTIC ODOR

### **FIRST AID MEASURES**

IF INHALED: REMOVE TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION. IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES, LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF SKIN CONTACT: IMMEDIATELY WASH SKIN WITH LOTS OF SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES; WASH BEFORE REUSE. GET MEDICAL ATTENTION IF IRRITATION PERSISTS AFTER WASHING.

CONTAINS WHITE MINERAL OIL. IF SWALLOWED DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

### **HEALTH HAZARD INFORMATION**

PRIMARY ROUTES OF EXPOSURE: SKIN OR EYE CONTACT, INHALATION. SIGNS AND SYMPTOMS OF EXPOSURE INHALATION: INHALATION OF VAPOR MAY CAUSE ASPIRATION PNEUMONIA. HIGHLY PURIFIED GRADE IS OF LOW TOXICITY. EYE CONTACT: NONE CURRENTLY KNOWN. SKIN CONTACT: 24-HOUR MILD IRRITATION. SWALLOWED: NONE CURRENTLY KNOWN. CHRONIC EFFECTS OF EXPOSURE: NO SPECIFIC INFORMATION AVAILABLE. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE REPORTED.

### **TOXICITY DATA**

ORAL: MOUSE LD50 = 22 G/KG

DERMAL: RABBIT 100 MGHr MILD IRRITATION EFFECTS

INHALATION: MAN TClO: 5mg/m<sup>3</sup>

CARCINOGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A QUESTIONABLE CARCINOGEN. OTHER DATA: NONE

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### **PERSONAL PROTECTION**

VENTILATION: GENERAL ROOM VENTILATION

RESPIRATORY PROTECTION: AVOID VAPORS OR MISTS. THIS IS NOT EXPECTED UNDER NORMAL CONDITIONS. NORMAL PERSONAL PROTECTIVE EQUIPMENT SHOULD BE USED AS REQUIRED IN THE WORK AREA.

### **FIRE AND EXPLOSION INFORMATION**

FLASH POINT ,DEG F: 270 FLAMMABLE LIMITS IN AIR %,LOWER :ND UPPER : ND  
METHOD USED :COC

### **EXTINGUISHING MEDIA**

USE DRY CHEMICAL, CO<sub>2</sub> ,OR ALCOHOL FOAM. **DO NOT USE WATER TO FIGHT FIRE.**  
SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD USE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE. UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

### **HAZARDOUS REACTIVITY**

STABILITY :STABLE

POLYMERIZATION : WILL NOT OCCUR

CONDITIONS TO AVOID: HIGH TEMPERATURES

MATERIALS TO AVOID OXIDIZERS

HAZARDOUS OXIDATION PRODUCTS: CARBON DIOXIDE AND CARBON MONOXIDE.

### **SPILL, LEAK AND DISPOSAL PROCEDURES**

UNDER NORMAL CONDITIONS:FOR SPILLS OR LEAKS, WEAR PROTECTIVE CLOTHING : RUBBER BOOTS GLOVES AND APRON. ALWAYS WEAR EYE PROTECTION. FOR SMALL SPILLS OR DRIPS, MOP OR WIPE UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STORM DRAINS ,SURFACE WATER AND SOILS. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING,AND HANDLING AND DISPOSAL OF WASTE. DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE CODE 105 FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES. NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

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### **SPECIAL PRECAUTIONS**

STORAGE AND HANDLING PRECAUTIONS: STORE IN A DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTAINER. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME OR OXIDIZERS.

### **REPAIR AND MAINTENANCE PRECAUTIONS**

NONE. OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

### **FOR ADDITIONAL INFORMATION**

DOT REGULATIONS: THIS PRODUCT IS NOT A HAZARDOUS MATERIAL UNDER ANY OF THE DOT HM1 81 CLASSES NO SPECIAL HAZARDOUS LABELS OR PLACARDS ARE REQUIRED.

CONTACT MSDS COORDINATOR DR. ARNEL D. POTTER, 847-234-1282