

600148-00 PAGE 1 OF 7

MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

APPROVAL DATE: 05/08/95

PRODUCT NAME: MOBIL DTE OIL LIGHT
SUPPLIER: MOBIL OIL CORP.
PRODUCTS AND TECHNOLOGY DEPT.
3225 GALLOWS RD.
FAIRFAX, VA 22037

24 - HOUR EMERGENCY (CALL COLLECT): 609-737-4411
PRODUCT AND MSDS INFORMATION: 800-662-4525 703-849-3265
CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

THIS PRODUCT IS NOT FORMULATED TO CONTAIN INGREDIENTS WHICH HAVE EXPOSURE LIMITS ESTABLISHED BY REGULATORY AGENCIES. IT IS NOT HAZARDOUS TO HEALTH AS DEFINED BY THE EUROPEAN UNION DANGEROUS SUBSTANCES/PREPARATIONS DIRECTIVES. SEE SECTION 15 FOR A REGULATORY ANALYSIS OF THE INGREDIENTS.

SEE SECTION 8 FOR EXPOSURE LIMITS (IF APPLICABLE).

3. HAZARDS IDENTIFICATION

US OSHA HAZARD COMMUNICATION STANDARD: PRODUCT ASSESSED IN ACCORDANCE WITH OSHA 29 CFR 1910.1200 AND DETERMINED NOT TO BE HAZARDOUS.
EFFECTS OF OVEREXPOSURE: NO SIGNIFICANT EFFECTS EXPECTED.
EMERGENCY RESPONSE DATA: LIGHT AMBER LIQUID. DOT ERG NO. - NA

4. FIRST AID MEASURES

EYE CONTACT: FLUSH THOROUGHLY WITH WATER. IF IRRITATION OCCURS, CALL A PHYSICIAN.
SKIN CONTACT: WASH CONTACT AREAS WITH SOAP AND WATER.
INHALATION: NOT EXPECTED TO BE A PROBLEM.
INGESTION: NOT EXPECTED TO BE A PROBLEM. HOWEVER, IF GREATER THAN 1/2 LITER (PINT) INGESTED, IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN, HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

MOBIL DTE OIL LIGHT

600148-00 PAGE 2 OF 7

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.
SPECIAL FIRE FIGHTING PROCEDURES: WATER OR FOAM MAY CAUSE FROTHING.

USE WATER TO KEEP FIRE EXPOSED CONTAINERS COOL. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURE. PREVENT RUNOFF FROM FIRE CONTROL OR DILUTION FROM ENTERING STREAMS, SEWERS, OR DRINKING WATER SUPPLY.

SPECIAL PROTECTIVE EQUIPMENT: FOR FIRES IN ENCLOSED AREAS, FIRE FIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE. FLASH POINT C(F): > 207(405) (ASTM D-92). FLAMMABLE LIMITS - LEL: NA, UEL: NA.

NFPA HAZARD ID: HEALTH: 0, FLAMMABILITY: 1, REACTIVITY: 0
HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE. ELEMENTAL OXIDES. METAL OXIDES.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER (800) 424-8802. IN CASE OF ACCIDENT OR ROAD SPILL NOTIFY CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: ADSORB ON FIRE RETARDANT TREATED SAWDUST, DIATOMACEOUS EARTH, ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

ENVIRONMENTAL PRECAUTIONS: PREVENT SPILLS FROM ENTERING STORM SEWERS OR DRAINS AND CONTACT WITH SOIL.

PERSONAL PRECAUTIONS: SEE SECTION 8

7. HANDLING AND STORAGE

HANDLING: NO SPECIAL PRECAUTIONS ARE NECESSARY BEYOND NORMAL GOOD HYGIENE PRACTICES. SEE SECTION 8 FOR ADDITIONAL PERSONAL PROTECTION ADVICE WHEN HANDLING THIS PRODUCT.

STORAGE: DO NOT STORE IN OPEN OR UNLABELLED CONTAINERS. STORE AWAY FROM STRONG OXIDIZING AGENTS OR COMBUSTIBLE MATERIAL.

MOBIL DTE OIL LIGHT

600148-00 PAGE 3 OF 7

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

RESPIRATORY PROTECTION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

EYE PROTECTION: NORMAL INDUSTRIAL EYE PROTECTION PRACTICES SHOULD BE EMPLOYED.

SKIN PROTECTION: NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

EXPOSURE LIMITS: THIS PRODUCT DOES NOT CONTAIN ANY COMPONENTS WHICH HAVE RECOGNIZED EXPOSURE LIMITS. HOWEVER, A THRESHOLD LIMIT VALUE OF 5.00 MG/M3 IS SUGGESTED FOR OIL MIST.

9. PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL PHYSICAL PROPERTIES ARE GIVEN BELOW. CONSULT PRODUCT DATA SHEET FOR SPECIFIC DETAILS.

APPEARANCE: LIQUID

COLOR: LIGHT AMBER

ODOR: MILD

ODOR THRESHOLD: NA

PH: NA

BOILING POINT C(F): > 316(600)

MELTING POINT C(F): NA

FLASH POINT C(F): > 207(405) (ASTM D-92)

FLAMMABILITY: NA

AUTO FLAMMABILITY: NE

EXPLOSIVE PROPERTIES: NA

OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-MMHG 20 C: < 0.1

VAPOR DENSITY: > 2.0

EVAPORATION RATE: NA

RELATIVE DENSITY, 15/4 C: 0.87

SOLUBILITY IN WATER: NEGLIGIBLE

PARTITION COEFFICIENT: > 3.5

VISCOSITY AT 40 C, CST: > 28.8

VISCOSITY AT 100 C, CST: 5.1

POUR POINT C(F): -7(20)

FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: EXEMPT IN U.S.

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

MOBIL DTE OIL LIGHT

600148-00 PAGE 4 OF 7

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): STABLE.

CONDITIONS TO AVOID: EXTREME HEAT.

INCOMPATIBILITY (MATERIALS TO AVOID): STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE. ELEMENTAL OXIDES.
METAL OXIDES.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): PRACTICALLY NON-TOXIC (LD50: GREATER THAN 2000 MG/KG). ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY (RABBITS): PRACTICALLY NON-TOXIC (LD50: GREATER THAN 2000 MG/KG). ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY (RATS): NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT.

EYE IRRITATION (RABBITS): PRACTICALLY NON-IRRITATING. (DRAIZE SCORE: 0 OR GREATER BUT 6 OR LESS). ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION (RABBITS): PRACTICALLY NON-IRRITATING. (PRIMARY IRRITATION INDEX: 0.5 OR LESS). ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

OTHER ACUTE TOXICITY DATA: THE ACUTE TOXICOLOGICAL RESULTS SUMMARIZED ABOVE ARE BASED ON TESTING OF REPRESENTATIVE MOBIL PRODUCTS. REPRESENTATIVE MOBIL FORMULATIONS HAVE SHOWN NO ACUTE EFFECTS, ADMINISTERED VIA THE INHALATION ROUTE, WHEN TESTED AT MAXIMUM ATTAINABLE OIL MIST OR VAPOR CONCENTRATIONS.

---SUBCHRONIC TOXICOLOGY (SUMMARY)---

REPRESENTATIVE MOBIL FORMULATIONS HAVE BEEN TESTED AT THE MOBIL ENVIRONMENTAL AND HEALTH SCIENCES LABORATORY BY DERMAL APPLICATIONS TO RATS 5 DAYS/WEEK FOR 90 DAYS AT DOSES SIGNIFICANTLY HIGHER THAN THOSE EXPECTED DURING NORMAL INDUSTRIAL EXPOSURE. EXTENSIVE EVALUATIONS, INCLUDING MICROSCOPIC EXAMINATION OF INTERNAL ORGANS AND CLINICAL CHEMISTRY OF BODY FLUIDS, SHOWED NO ADVERSE EFFECTS.

---REPRODUCTIVE TOXICOLOGY (SUMMARY)---

DERMAL EXPOSURE OF PREGNANT RATS TO REPRESENTATIVE FORMULATIONS DID NOT CAUSE ADVERSE EFFECTS IN EITHER THE MOTHERS OR THEIR OFFSPRING.

---CHRONIC TOXICOLOGY (SUMMARY)---

THE BASE OILS IN THIS PRODUCT ARE SEVERELY SOLVENT REFINED AND/OR SEVERELY HYDROTREATED. CHRONIC MOUSE SKIN PAINTING STUDIES OF SEVERELY TREATED OILS SHOWED NO EVIDENCE OF CARCINOGENIC EFFECTS.

(SECTION CONTINUED NEXT PAGE)

MOBIL DTE OIL LIGHT

600148-00 PAGE 5 OF 7

THESE RESULTS ARE CONFIRMED ON A CONTINUING BASIS USING THE MOBIL MODIFIED AMES TEST.

---SENSITIZATION (SUMMARY)---

REPRESENTATIVE MOBIL FORMULATIONS HAVE NOT CAUSED SKIN SENSITIZATION IN GUINEA PIGS.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:

ACUTE LC/EC50 FISH: JUVENILE RAINBOW TROUT: PRACTICALLY NON-TOXIC ---BASED ON TESTING OF SIMILAR PRODUCTS.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: PRODUCT IS SUITABLE FOR BURNING IN AN ENCLOSED, CONTROLLED BURNER FOR FUEL VALUE OR DISPOSAL BY SUPERVISED INCINERATION. SUCH BURNING MAY BE LIMITED PURSUANT TO THE RESOURCE CONSERVATION AND RECOVERY ACT. IN ADDITION, THE PRODUCT IS SUITABLE FOR PROCESSING BY AN APPROVED RECYCLING FACILITY OR CAN BE DISPOSED OF AT ANY GOVERNMENT APPROVED WASTE DISPOSAL FACILITY. USE OF THESE METHODS IS SUBJECT TO USER COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS AND CONSIDERATION OF PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

RCRA INFORMATION: THE UNUSED PRODUCT, IN OUR OPINION, IS NOT SPECIFICALLY LISTED BY THE EPA AS A HAZARDOUS WASTE (40 CFR, PART 261D), NOR IS IT FORMULATED TO CONTAIN MATERIALS WHICH ARE LISTED HAZARDOUS WASTES. IT DOES NOT EXHIBIT THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSIVITY, OR REACTIVITY AND IS NOT FORMULATED WITH CONTAMINANTS AS DETERMINED BY THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP). HOWEVER, USED PRODUCT MAY BE REGULATED.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

MOBIL DTE OIL LIGHT

600148-00 PAGE 6 OF 7

15. REGULATORY INFORMATION
-----GOVERNMENTAL INVENTORY STATUS: ALL COMPONENTS COMPLY WITH TSCA AND
DSL.

EU CLASSIFICATION AND LABELING: EU LABELING NOT REQUIRED.

U.S. SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III:
THIS PRODUCT CONTAINS NO "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: NONE.

THIS PRODUCT CONTAINS NO CHEMICALS REPORTABLE UNDER
SARA (313) TOXIC RELEASE PROGRAM.THIS PRODUCT HAS BEEN AUTHORIZED BY USDA FOR USE UNDER THE FOLLOWING
CATEGORY: H2 - LUBRICANTS WITH NO FOOD CONTACT

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
-----	-----	-----
PHOSPHORODITHOIC ACID, O,O-DI C1-14-ALKYL ESTERS, ZINC SALTS (2: 1) (ZDDP) (0.07%)	68649-42-3	22

--- REGULATORY LISTS SEARCHED ---

1 = ACGIH ALL	6 = IARC 1	11 = TSCA 4	17 = CA P65	22 = MI 293
2 = ACGIH A1	7 = IARC 2A	12 = TSCA 5A2	18 = CA RTK	23 = MN RTK
3 = ACGIH A2	8 = IARC 2B	13 = TSCA 5E	19 = FL RTK	24 = NJ RTK
4 = NTP CARC	9 = OSHA CARC	14 = TSCA 6	20 = IL RTK	25 = PA RTK
5 = NTP SUS	10 = OSHA Z	15 = TSCA 12B	21 = LA RTK	26 = RI RTK

CODE KEY: CARC = CARCINOGEN; SUS = SUSPECTED CARCINOGEN

MOBIL DTE OIL LIGHT

600148-00 PAGE 7 OF 7

16. OTHER INFORMATION

CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES

USE: LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBS.

SEE CONTAINER LABEL FOR INGREDIENT INFORMATION.

FOR MOBIL USE ONLY: MHC: 1* 1* NA 0* 0*, MPPEC: A, REQ: US -
MARKETING, SAFE USE: L

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

PREPARED BY: MOBIL OIL CORPORATION
ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT, PRINCETON, NJ