

MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

APPROVAL DATE: 10/21/96

PRODUCT NAME: MOBIL SHC 634
 SUPPLIER: MOBIL OIL CORP.
 AMERICAS MARKETING AND REFINING
 3225 GALLOWES RD.
 FAIRFAX, VA 22037

24 - HOUR EMERGENCY (CALL COLLECT): 609-737-4411
 PRODUCT AND MSDS INFORMATION: 800-662-4525 703-849-5700
 CHEMTREC: 800-424-9300 202-483-7616

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SYN. HYDROCARBONS AND ADDITIVES

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

THIS PRODUCT IS NOT FORMULATED TO CONTAIN INGREDIENTS WHICH HAVE EXPOSURE LIMITS ESTABLISHED BY U.S. 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 15 FOR EUROPEAN LABEL INFORMATION.

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: STRAW 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

(SECTION CONTINUED NEXT PAGE)

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.

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): > 210(410) (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.

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: STRAW

ODOR: MILD

ODOR THRESHOLD-PPM: NE

PH: NA

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

MELTING POINT C(F): NA

FLASH POINT C(F): > 210(410) (ASTM D-92)

FLAMMABILITY: NE

AUTO FLAMMABILITY: NE

EXPLOSIVE PROPERTIES: NA

OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-MMHG 20 C: < 0.1

VAPOR DENSITY: > 2.0

EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 0.849

SOLUBILITY IN WATER: NEGLIGIBLE

PARTITION COEFFICIENT: > 3.5

VISCOSITY AT 40 C, CST: > 418.5

VISCOSITY AT 100 C, CST: 45.8

POUR POINT C(F): -40(-40)

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

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:
GREATER THAN 6 BUT 15 OR LESS). ---BASED ON TESTING OF SIMILAR
PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION (RABBITS): PRACTICALLY NON-IRRITATING. (PRIMARY
IRRITATION INDEX: GREATER THAN 0.5 BUT LESS THAN 3). ---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.

---OTHER TOXICOLOGY DATA---

THIS PRODUCT IS FORMULATED WITH A SYNTHETIC HYDROCARBON AS THE BASE
STOCK. THE MOBIL ENVIRONMENTAL AND HEALTH SCIENCES LABORATORY
HAS TESTED REPRESENTATIVE SYNTHETIC BASE STOCKS TO ASSESS THEIR
POTENTIAL ADVERSE EFFECTS ON HUMAN HEALTH. ASSESSMENT OF HUMAN
HEALTH EFFECTS WAS BASED ON ACUTE ORAL, DERMAL, AND INHALATION
TOXICITY; EYE AND SKIN IRRITATION; SUBCHRONIC DERMAL TOXICITY AND
REPRODUCTIVE STUDIES; GUINEA PIG SENSITIZATION; AND MUTAGENICITY
AND CHROMOSOMAL DAMAGE ASSAYS. NONE OF THESE BASE STOCKS APPEARS
TO POSE A HEALTH HAZARD TO HUMANS UNDER CONDITIONS OF EXPECTED
USE.

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 AN APPROPRIATE GOVERNMENT 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

15. REGULATORY INFORMATION

GOVERNMENTAL INVENTORY STATUS: ALL COMPONENTS COMPLY WITH TSCA, AICS
AND DSL.

EU LABELING: EU LABELING NOT REQUIRED.

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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
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*** NO REPORTABLE INGREDIENTS ***

--- 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

16. OTHER INFORMATION

USE: GEAR AND BEARING LUBRICANT

NOTE: MOBIL PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBS

PLEASE CALL THE CUSTOMER RESPONSE CENTER ON 800-662-4525 FOR FORMULATION DISCLOSURE.

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

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