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SDS

Common Name: ATF D/M**Manufacturer:** EXXON MOBIL**SDS Revision Date:** 3/17/2015**SDS Format:** GHS-US**Grainger Item Number(s):** 5XB55**Manufacturer Model Number(s):**

SDS Table of Contents

Click the desired link below to jump directly to that section in the SDS.

[SECTION 1 PRODUCT AND COMPANY IDENTIFICATION](#)
[SECTION 2 HAZARDS IDENTIFICATION](#)
[SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS](#)
[SECTION 4 FIRST AID MEASURES](#)
[SECTION 5 FIRE FIGHTING MEASURES](#)
[SECTION 6 ACCIDENTAL RELEASE MEASURES](#)
[SECTION 7 HANDLING AND STORAGE](#)
[SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION](#)
[SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES](#)
[SECTION 10 STABILITY AND REACTIVITY](#)
[SECTION 11 TOXICOLOGICAL INFORMATION](#)
[SECTION 12 ECOLOGICAL INFORMATION](#)
[SECTION 13 DISPOSAL CONSIDERATIONS](#)
[SECTION 14 TRANSPORT INFORMATION](#)
[SECTION 15 REGULATORY INFORMATION](#)
[SECTION 16 OTHER INFORMATION](#)

EXXON MOBIL

PRODUCT NAME: MOBIL ATF D/M

REVISION DATE: 17 MAR 2015

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION



PRODUCT:

PRODUCT NAME: MOBIL ATF D/M

PRODUCT DESCRIPTION: BASE OIL AND ADDITIVES

PRODUCT CODE: 201530202070, 525345-00, 97Z692

INTENDED USE: AUTOMATIC TRANSMISSION FLUID

COMPANY IDENTIFICATION:

SUPPLIER:
EXXON MOBIL CORPORATION
22777 SPRINGWOODS VILLAGE PARKWAY
SPRING, TX. 77389
USA

24 HOUR HEALTH EMERGENCY: 609-737-4411

TRANSPORTATION EMERGENCY PHONE: 800-424-9300 OR 703-527-3887 CHEMTREC

PRODUCT TECHNICAL INFORMATION: 800-662-4525

MSDS INTERNET ADDRESS:
HTTP://WWW.EXXON.COM
HTTP://WWW.MOBIL.COM

SECTION 2 HAZARDS IDENTIFICATION



THIS MATERIAL IS HAZARDOUS ACCORDING TO REGULATORY GUIDELINES (SEE (M) SDS SECTION 15).

CLASSIFICATION:

SKIN SENSITIZER: CATEGORY 1.

LABEL:

PICTOGRAM: EXCLAMATION MARK

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

H317: MAY CAUSE ALLERGIC SKIN REACTION.

PRECAUTIONARY STATEMENTS:

P101:

IF MEDICAL ADVICE IS NEEDED, HAVE PRODUCT CONTAINER OR LABEL AT HAND.

P102: KEEP OUT OF REACH OF CHILDREN.

P103: READ LABEL BEFORE USE.

P261: AVOID BREATHING MIST / VAPOURS.

P272:

CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.

P273: AVOID RELEASE TO THE ENVIRONMENT.

P280: WEAR PROTECTIVE GLOVES.

P302 + P352:

IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.

P333 + P313:

IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION.

P501:
DISPOSE OF CONTENTS AND CONTAINER IN ACCORDANCE WITH LOCAL REGULATIONS.

CONTAINS: BIS(2-HYDROXYETHYL) TALLOW AMINE

OTHER HAZARD INFORMATION:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC):
NONE AS DEFINED UNDER 29 CFR 1910.1200.

PHYSICAL / CHEMICAL HAZARDS: NO SIGNIFICANT HAZARDS.

HEALTH HAZARDS:
HIGH-PRESSURE INJECTION UNDER SKIN MAY CAUSE SERIOUS DAMAGE. EXCESSIVE EXPOSURE MAY RESULT IN EYE, SKIN, OR RESPIRATORY IRRITATION.

ENVIRONMENTAL HAZARDS:
EXPECTED TO BE HARMFUL TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

NFPA HAZARD ID:
HEALTH 2
FLAMMABILITY 1
REACTIVITY 0

HMIS HAZARD ID:
HEALTH 2
FLAMMABILITY 1
REACTIVITY 0

NOTE:
THIS MATERIAL SHOULD NOT BE USED FOR ANY OTHER PURPOSE THAN THE INTENDED USE IN SECTION 1 WITHOUT EXPERT ADVICE. HEALTH STUDIES HAVE SHOWN THAT CHEMICAL EXPOSURE MAY CAUSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PERSON.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS



THIS MATERIAL IS DEFINED AS A MIXTURE.

HAZARDOUS SUBSTANCE(S) OR COMPLEX SUBSTANCE(S) REQUIRED FOR DISCLOSURE:

NAME	CAS#	CONCENTRATION*	GHS HAZARD CODES
1H-IMIDAZOLE-1-ETHANOL, 2-(HEPTADECENYL)-4, 5-DIHYDRO-	27136-73-8	0.1 - <1%	H302, H314(1B), H400 (M FACTOR 1), H410(M FACTOR 1)
2-PROPANOL, 1-(TERT-DODECYLTHIO)-	67124-09-8	1 - 2.5%	H317, H400 (M FACTOR 1), H410(M FACTOR 1)
BENZENAMINE, AR-NONYL -N-(NONYL PHENYL)-	36878-20-3	1 - <5%	H413
BIS(2-HYDROXYETHYL) TALLOW AMINE	61791-44-4	0.1 - <0.25%	H302, H317, H330(2), H314(1B),

H400
(M FACTOR 10)

DIPHENYLAMINE	122-39-4	0.1 - <1%	H301, H311, H331, H373, H400 (M FACTOR 1), H410 (M FACTOR 1)
HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	64742-55-8	10 - <20%	H304
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	64742-56-9	70 - <80%	H304

* ALL CONCENTRATIONS ARE PERCENT BY WEIGHT UNLESS MATERIAL IS A GAS.
GAS CONCENTRATIONS ARE IN PERCENT BY VOLUME.

AS PER PARAGRAPH (I) OF 29 CFR 1910.1200, FORMULATION IS CONSIDERED
A TRADE SECRET AND SPECIFIC CHEMICAL IDENTITY AND EXACT PERCENTAGE
(CONCENTRATION) OF COMPOSITION MAY HAVE BEEN WITHHELD. SPECIFIC CHEMICAL
IDENTITY AND EXACT PERCENTAGE COMPOSITION WILL BE PROVIDED TO HEALTH
PROFESSIONALS, EMPLOYEES, OR DESIGNATED REPRESENTATIVES IN ACCORDANCE
WITH APPLICABLE PROVISIONS OF PARAGRAPH (I).

SECTION 4 FIRST AID MEASURES



INHALATION:

REMOVE FROM FURTHER EXPOSURE. FOR THOSE PROVIDING ASSISTANCE, AVOID
EXPOSURE TO YOURSELF OR OTHERS. USE ADEQUATE RESPIRATORY PROTECTION. IF
RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, OR UNCONSCIOUSNESS OCCURS,
SEEK IMMEDIATE MEDICAL ASSISTANCE. IF BREATHING HAS STOPPED, ASSIST
VENTILATION WITH A MECHANICAL DEVICE OR USE MOUTH-TO-MOUTH RESUSCITATION.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING.
LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. IF PRODUCT IS INJECTED INTO
OR UNDER THE SKIN, OR INTO ANY PART OF THE BODY, REGARDLESS OF THE
APPEARANCE OF THE WOUND OR ITS SIZE, THE INDIVIDUAL SHOULD BE EVALUATED
IMMEDIATELY BY A PHYSICIAN AS A SURGICAL EMERGENCY. EVEN THOUGH INITIAL
SYMPTOMS FROM HIGH PRESSURE INJECTION MAY BE MINIMAL OR ABSENT, EARLY
SURGICAL TREATMENT WITHIN THE FIRST FEW HOURS MAY SIGNIFICANTLY REDUCE
THE ULTIMATE EXTENT OF INJURY.

EYE CONTACT:

FLUSH THOROUGHLY WITH WATER. IF IRRITATION OCCURS, GET MEDICAL
ASSISTANCE.

INGESTION:

FIRST AID IS NORMALLY NOT REQUIRED. SEEK MEDICAL ATTENTION IF DISCOMFORT
OCCURS.

SECTION 5 FIRE FIGHTING MEASURES



EXTINGUISHING MEDIA:

APPROPRIATE EXTINGUISHING MEDIA:
USE WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE (CO₂) TO EXTINGUISH
FLAMES.

INAPPROPRIATE EXTINGUISHING MEDIA: STRAIGHT STREAMS OF WATER

FIRE FIGHTING:

FIRE FIGHTING INSTRUCTIONS:
EVACUATE AREA. PREVENT RUNOFF FROM FIRE CONTROL OR DILUTION FROM ENTERING
STREAMS, SEWERS, OR DRINKING WATER SUPPLY. FIREFIGHTERS SHOULD USE
STANDARD PROTECTIVE EQUIPMENT AND IN ENCLOSED SPACES, SELF-CONTAINED
BREATHING APPARATUS (SCBA). USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES
AND TO PROTECT PERSONNEL.

HAZARDOUS COMBUSTION PRODUCTS:
INCOMPLETE COMBUSTION PRODUCTS, SMOKE, FUME, SULFUR OXIDES, ALDEHYDES,
OXIDES OF CARBON

FLAMMABILITY PROPERTIES:

FLASH POINT [METHOD]: >177 DEG. C (351 DEG. F) [ASTM D-92]

FLAMMABLE LIMITS (APPROXIMATE VOLUME % IN AIR):

LEL: 0.9

UEL: 7.0

AUTOIGNITION TEMPERATURE: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES



NOTIFICATION PROCEDURES:

IN THE EVENT OF A SPILL OR ACCIDENTAL RELEASE, NOTIFY RELEVANT AUTHORITIES
IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. US REGULATIONS REQUIRE
REPORTING RELEASES OF THIS MATERIAL TO THE ENVIRONMENT WHICH EXCEED THE
APPLICABLE REPORTABLE QUANTITY OR OIL SPILLS WHICH COULD REACH ANY
WATERWAY INCLUDING INTERMITTENT DRY CREEKS. THE NATIONAL RESPONSE CENTER
CAN BE REACHED AT (800)424-8802.

PROTECTIVE MEASURES:

AVOID CONTACT WITH SPILLED MATERIAL. SEE SECTION 5 FOR FIRE FIGHTING
INFORMATION. SEE THE HAZARD IDENTIFICATION SECTION FOR SIGNIFICANT
HAZARDS. SEE SECTION 4 FOR FIRST AID ADVICE. SEE SECTION 8 FOR ADVICE ON
THE MINIMUM REQUIREMENTS FOR PERSONAL PROTECTIVE EQUIPMENT. ADDITIONAL
PROTECTIVE MEASURES MAY BE NECESSARY, DEPENDING ON THE SPECIFIC
CIRCUMSTANCES AND/OR THE EXPERT JUDGMENT OF THE EMERGENCY RESPONDERS.

FOR EMERGENCY RESPONDERS:

RESPIRATORY PROTECTION:

RESPIRATORY PROTECTION WILL BE NECESSARY ONLY IN SPECIAL CASES, E.G.,
FORMATION OF MISTS. HALF-FACE OR FULL-FACE RESPIRATOR WITH FILTER(S)
FOR DUST/ORGANIC VAPOR OR SELF CONTAINED BREATHING APPARATUS (SCBA) CAN
BE USED DEPENDING ON THE SIZE OF SPILL AND POTENTIAL LEVEL OF EXPOSURE.
IF THE EXPOSURE CANNOT BE COMPLETELY CHARACTERIZED OR AN OXYGEN DEFICIENT
ATMOSPHERE IS POSSIBLE OR ANTICIPATED, SCBA IS RECOMMENDED. WORK GLOVES
THAT ARE RESISTANT TO HYDROCARBONS ARE RECOMMENDED. GLOVES MADE OF
POLYVINYL ACETATE (PVA) ARE NOT WATER-RESISTANT AND ARE NOT SUITABLE FOR
EMERGENCY USE. CHEMICAL GOGGLES ARE RECOMMENDED IF SPLASHES OR CONTACT
WITH EYES IS POSSIBLE.

SMALL SPILLS: NORMAL ANTISTATIC WORK CLOTHES ARE USUALLY ADEQUATE.

LARGE SPILLS:

FULL BODY SUIT OF CHEMICAL RESISTANT, ANTISTATIC MATERIAL IS RECOMMENDED.

SPILL MANAGEMENT:

LAND SPILL:

STOP LEAK IF YOU CAN DO IT WITHOUT RISK. RECOVER BY PUMPING OR WITH SUITABLE ABSORBENT.

WATER SPILL:

STOP LEAK IF YOU CAN DO IT WITHOUT RISK. CONFINE THE SPILL IMMEDIATELY WITH BOOMS. WARN OTHER SHIPPING. REMOVE FROM THE SURFACE BY SKIMMING OR WITH SUITABLE ABSORBENTS. SEEK THE ADVICE OF A SPECIALIST BEFORE USING DISPERSANTS.

WATER SPILL AND LAND SPILL RECOMMENDATIONS ARE BASED ON THE MOST LIKELY SPILL SCENARIO FOR THIS MATERIAL; HOWEVER, GEOGRAPHIC CONDITIONS, WIND, TEMPERATURE, (AND IN THE CASE OF A WATER SPILL) WAVE AND CURRENT DIRECTION AND SPEED MAY GREATLY INFLUENCE THE APPROPRIATE ACTION TO BE TAKEN. FOR THIS REASON, LOCAL EXPERTS SHOULD BE CONSULTED.

NOTE: LOCAL REGULATIONS MAY PRESCRIBE OR LIMIT ACTION TO BE TAKEN.

ENVIRONMENTAL PRECAUTIONS:

LARGE SPILLS:

DIKE FAR AHEAD OF LIQUID SPILL FOR LATER RECOVERY AND DISPOSAL. PREVENT ENTRY INTO WATERWAYS, SEWERS, BASEMENTS OR CONFINED AREAS.

SECTION 7 HANDLING AND STORAGE



HANDLING:

PREVENT SMALL SPILLS AND LEAKAGE TO AVOID SLIP HAZARD. MATERIAL CAN ACCUMULATE STATIC CHARGES WHICH MAY CAUSE AN ELECTRICAL SPARK (IGNITION SOURCE). WHEN THE MATERIAL IS HANDLED IN BULK, AN ELECTRICAL SPARK COULD IGNITE ANY FLAMMABLE VAPORS FROM LIQUIDS OR RESIDUES THAT MAY BE PRESENT (E.G., DURING SWITCH-LOADING OPERATIONS). USE PROPER BONDING AND/OR GROUND PROCEDURES. HOWEVER, BONDING AND GROUNDS MAY NOT ELIMINATE THE HAZARD FROM STATIC ACCUMULATION. CONSULT LOCAL APPLICABLE STANDARDS FOR GUIDANCE. ADDITIONAL REFERENCES INCLUDE AMERICAN PETROLEUM INSTITUTE 2003 (PROTECTION AGAINST IGNITIONS ARISING OUT OF STATIC, LIGHTNING AND STRAY CURRENTS) OR NATIONAL FIRE PROTECTION AGENCY 77 (RECOMMENDED PRACTICE ON STATIC ELECTRICITY) OR CENELEC CLC/TR 50404 (ELECTROSTATICS - CODE OF PRACTICE FOR THE AVOIDANCE OF HAZARDS DUE TO STATIC ELECTRICITY).

STATIC ACCUMULATOR: THIS MATERIAL IS A STATIC ACCUMULATOR.

STORAGE:

THE CONTAINER CHOICE, FOR EXAMPLE STORAGE VESSEL, MAY EFFECT STATIC ACCUMULATION AND DISSIPATION. DO NOT STORE IN OPEN OR UNLABELLED CONTAINERS. KEEP AWAY FROM INCOMPATIBLE MATERIALS.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION



EXPOSURE LIMIT VALUES:

EXPOSURE LIMITS/STANDARDS (NOTE: EXPOSURE LIMITS ARE NOT ADDITIVE):

SUBSTANCE NAME	FORM	LIMIT / STANDARD	NOTE	SOURCE
DIPHENYLAMINE		TWA 10 MG/M3	N/A	ACGIH
HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	MIST.	TWA 5 MG/M3	N/A	OSHA Z1
HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	INHALABLE FRACTION.	TWA 5 MG/M3	N/A	ACGIH
HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	MIST.	TWA 5 MG/M3	N/A	ACGIH
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	MIST.	TWA 5 MG/M3	N/A	OSHA Z1
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	INHALABLE FRACTION.	TWA 5 MG/M3	N/A	ACGIH
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	MIST.	TWA 5 MG/M3	N/A	ACGIH

EXPOSURE LIMITS/STANDARDS FOR MATERIALS THAT CAN BE FORMED WHEN HANDLING THIS PRODUCT:

WHEN MISTS/AEROSOLS CAN OCCUR THE FOLLOWING ARE RECOMMENDED:
5 MG/M3 - ACGIH TLV (INHALABLE FRACTION), 5 MG/M3 - OSHA PEL.

NOTE:

LIMITS/STANDARDS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

NO BIOLOGICAL LIMITS ALLOCATED.

ENGINEERING CONTROLS:

THE LEVEL OF PROTECTION AND TYPES OF CONTROLS NECESSARY WILL VARY DEPENDING UPON POTENTIAL EXPOSURE CONDITIONS. CONTROL MEASURES TO CONSIDER:

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

PERSONAL PROTECTION:

PERSONAL PROTECTIVE EQUIPMENT SELECTIONS VARY BASED ON POTENTIAL EXPOSURE CONDITIONS SUCH AS APPLICATIONS, HANDLING PRACTICES, CONCENTRATION AND VENTILATION. INFORMATION ON THE SELECTION OF PROTECTIVE EQUIPMENT FOR USE WITH THIS MATERIAL, AS PROVIDED BELOW, IS BASED UPON INTENDED, NORMAL USAGE.

RESPIRATORY PROTECTION:

IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONTAMINANT

CONCENTRATIONS AT A LEVEL WHICH IS ADEQUATE TO PROTECT WORKER HEALTH, AN APPROVED RESPIRATOR MAY BE APPROPRIATE. RESPIRATOR SELECTION, USE, AND MAINTENANCE MUST BE IN ACCORDANCE WITH REGULATORY REQUIREMENTS, IF APPLICABLE. TYPES OF RESPIRATORS TO BE CONSIDERED FOR THIS MATERIAL INCLUDE:

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

FOR HIGH AIRBORNE CONCENTRATIONS, USE AN APPROVED SUPPLIED-AIR RESPIRATOR, OPERATED IN POSITIVE PRESSURE MODE. SUPPLIED AIR RESPIRATORS WITH AN ESCAPE BOTTLE MAY BE APPROPRIATE WHEN OXYGEN LEVELS ARE INADEQUATE, GAS/VAPOR WARNING PROPERTIES ARE POOR, OR IF AIR PURIFYING FILTER CAPACITY/RATING MAY BE EXCEEDED.

HAND PROTECTION:

ANY SPECIFIC GLOVE INFORMATION PROVIDED IS BASED ON PUBLISHED LITERATURE AND GLOVE MANUFACTURER DATA. GLOVE SUITABILITY AND BREAKTHROUGH TIME WILL DIFFER DEPENDING ON THE SPECIFIC USE CONDITIONS. CONTACT THE GLOVE MANUFACTURER FOR SPECIFIC ADVICE ON GLOVE SELECTION AND BREAKTHROUGH TIMES FOR YOUR USE CONDITIONS. INSPECT AND REPLACE WORN OR DAMAGED GLOVES. THE TYPES OF GLOVES TO BE CONSIDERED FOR THIS MATERIAL INCLUDE: CHEMICAL RESISTANT GLOVES ARE RECOMMENDED.

EYE PROTECTION:

IF CONTACT IS LIKELY, SAFETY GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN AND BODY PROTECTION:

ANY SPECIFIC CLOTHING INFORMATION PROVIDED IS BASED ON PUBLISHED LITERATURE OR MANUFACTURER DATA. THE TYPES OF CLOTHING TO BE CONSIDERED FOR THIS MATERIAL INCLUDE: CHEMICAL/OIL RESISTANT CLOTHING IS RECOMMENDED.

SPECIFIC HYGIENE MEASURES:

ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL AND BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHING AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS. DISCARD CONTAMINATED CLOTHING AND FOOTWEAR THAT CANNOT BE CLEANED. PRACTICE GOOD HOUSEKEEPING.

ENVIRONMENTAL CONTROLS:

COMPLY WITH APPLICABLE ENVIRONMENTAL REGULATIONS LIMITING DISCHARGE TO AIR, WATER AND SOIL. PROTECT THE ENVIRONMENT BY APPLYING APPROPRIATE CONTROL MEASURES TO PREVENT OR LIMIT EMISSIONS.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES



NOTE:

PHYSICAL AND CHEMICAL PROPERTIES ARE PROVIDED FOR SAFETY, HEALTH AND ENVIRONMENTAL CONSIDERATIONS ONLY AND MAY NOT FULLY REPRESENT PRODUCT SPECIFICATIONS. CONTACT THE SUPPLIER FOR ADDITIONAL INFORMATION.

GENERAL INFORMATION:

PHYSICAL STATE: LIQUID

COLOR: RED

ODOR: CHARACTERISTIC

ODOR THRESHOLD: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION:

RELATIVE DENSITY (AT 15 DEG. C): 0.863

FLAMMABILITY (SOLID, GAS): N/A

FLASH POINT [METHOD]: >177 DEG. C (351 DEG. F) [ASTM D-92]

FLAMMABLE LIMITS (APPROXIMATE VOLUME % IN AIR):

LEL: 0.9

UEL: 7.0

AUTOIGNITION TEMPERATURE: N/D

BOILING POINT / RANGE: >316 DEG. C (600 DEG. F)

DECOMPOSITION TEMPERATURE: N/D

VAPOR DENSITY (AIR = 1): >2 AT 101 KPA

VAPOR PRESSURE: <0.013 KPA (0.1 MMHg) AT 20 DEG. C

EVAPORATION RATE (N-BUTYL ACETATE = 1): N/D

PH: N/A

LOG POW (N-OCTANOL/WATER PARTITION COEFFICIENT): >3.5

SOLUBILITY IN WATER: NEGLIGIBLE

VISCOSITY:

34 CST (34 MM2/SEC) AT 40 DEG. C

7.2 CST (7.2 MM2/SEC) AT 100 DEG. C

OXIDIZING PROPERTIES: SEE HAZARDS IDENTIFICATION SECTION.

OTHER INFORMATION:

FREEZING POINT: N/D

MELTING POINT: N/A

POUR POINT: -34 DEG. C (-30 DEG. F)

DMSO EXTRACT (MINERAL OIL ONLY), IP-346: <3 %WT

SECTION 10 STABILITY AND REACTIVITY



REACTIVITY: SEE SUB-SECTIONS BELOW.

STABILITY: MATERIAL IS STABLE UNDER NORMAL CONDITIONS.

CONDITIONS TO AVOID: EXCESSIVE HEAT. HIGH ENERGY SOURCES OF IGNITION.

MATERIALS TO AVOID: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

MATERIAL DOES NOT DECOMPOSE AT AMBIENT TEMPERATURES.

POSSIBILITY OF HAZARDOUS REACTIONS:
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11 TOXICOLOGICAL INFORMATION



INFORMATION ON TOXICOLOGICAL EFFECTS:

HAZARD CLASS	CONCLUSION / REMARKS
INHALATION:	
ACUTE TOXICITY: NO END POINT DATA FOR MATERIAL.	MINIMALLY TOXIC. BASED ON ASSESSMENT OF THE COMPONENTS.
IRRITATION: NO END POINT DATA FOR MATERIAL.	NEGLIGIBLE HAZARD AT AMBIENT/NORMAL HANDLING TEMPERATURES. BASED ON ASSESSMENT OF THE COMPONENTS.
INGESTION:	
ACUTE TOXICITY: NO END POINT DATA FOR MATERIAL.	MINIMALLY TOXIC. BASED ON TEST DATA FOR STRUCTURALLY SIMILAR MATERIALS.
SKIN:	
ACUTE TOXICITY: NO END POINT DATA FOR MATERIAL.	MINIMALLY TOXIC. BASED ON ASSESSMENT OF THE COMPONENTS.
SKIN CORROSION/IRRITATION: NO END POINT DATA FOR MATERIAL.	NEGLIGIBLE IRRITATION TO SKIN AT AMBIENT TEMPERATURES. BASED ON ASSESSMENT OF THE COMPONENTS.
EYE:	
SERIOUS EYE DAMAGE/IRRITATION: NO END POINT DATA FOR MATERIAL.	MAY CAUSE MILD, SHORT-LASTING DISCOMFORT TO EYES. BASED ON ASSESSMENT OF THE COMPONENTS.
SENSITIZATION:	
RESPIRATORY SENSITIZATION: NO END POINT DATA FOR MATERIAL.	NOT EXPECTED TO BE A RESPIRATORY SENSITIZER.
SKIN SENSITIZATION: NO END POINT DATA FOR MATERIAL.	CONTAINS A SUBSTANCE THAT MAY CAUSE SKIN SENSITIZATION. BASED ON ASSESSMENT OF THE COMPONENTS.
ASPIRATION: DATA AVAILABLE.	NOT EXPECTED TO BE AN ASPIRATION HAZARD. BASED ON PHYSICO-CHEMICAL PROPERTIES OF THE MATERIAL.
GERM CELL MUTAGENICITY:	

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO BE A GERM CELL
MUTAGEN. BASED ON ASSESSMENT OF
THE COMPONENTS.

CARCINOGENICITY:

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO CAUSE CANCER. BASED
ON ASSESSMENT OF THE COMPONENTS.

REPRODUCTIVE TOXICITY:

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO BE A REPRODUCTIVE
TOXICANT. BASED ON ASSESSMENT OF
THE COMPONENTS.

LACTATION:

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO CAUSE HARM TO
BREAST-FED CHILDREN.

SPECIFIC TARGET ORGAN TOXICITY
(STOT):

SINGLE EXPOSURE:

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO CAUSE ORGAN DAMAGE
FROM A SINGLE EXPOSURE.

REPEATED EXPOSURE:

NO END POINT DATA FOR MATERIAL.

NOT EXPECTED TO CAUSE ORGAN DAMAGE
FROM PROLONGED OR REPEATED EXPOSURE.
BASED ON ASSESSMENT OF THE
COMPONENTS.

OTHER INFORMATION:

FOR THE PRODUCT ITSELF:

AN INGREDIENT OR INGREDIENTS THAT ARE CLASSIFIED AS A SKIN SENSITIZER.

CONTAINS:

BASE OIL SEVERELY REFINED:

NOT CARCINOGENIC IN ANIMAL STUDIES. REPRESENTATIVE MATERIAL PASSES IP-346,
MODIFIED AMES TEST, AND/OR OTHER SCREENING TESTS. DERMAL AND INHALATION
STUDIES SHOWED MINIMAL EFFECTS; LUNG NON-SPECIFIC INFILTRATION OF IMMUNE
CELLS, OIL DEPOSITION AND MINIMAL GRANULOMA FORMATION. NOT SENSITIZING
IN TEST ANIMALS.

THE FOLLOWING INGREDIENTS ARE CITED ON THE LISTS BELOW: NONE.

REGULATORY LISTS SEARCHED:

- 1 = NTP CARC
- 2 = NTP SUS
- 3 = IARC 1
- 4 = IARC 2A
- 5 = IARC 2B
- 6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION



THE INFORMATION GIVEN IS BASED ON DATA AVAILABLE FOR THE MATERIAL,
THE COMPONENTS OF THE MATERIAL, AND SIMILAR MATERIALS.

ECOTOXICITY:

MATERIAL:

EXPECTED TO BE HARMFUL TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

MOBILITY:**BASE OIL COMPONENT:**

LOW SOLUBILITY AND FLOATS AND IS EXPECTED TO MIGRATE FROM WATER TO THE LAND. EXPECTED TO PARTITION TO SEDIMENT AND WASTEWATER SOLIDS.

PERSISTENCE AND DEGRADABILITY:**BIODEGRADATION:**

BASE OIL COMPONENT: EXPECTED TO BE INHERENTLY BIODEGRADABLE

BIOACCUMULATION POTENTIAL:**BASE OIL COMPONENT:**

HAS THE POTENTIAL TO BIOACCUMULATE, HOWEVER METABOLISM OR PHYSICAL PROPERTIES MAY REDUCE THE BIOCONCENTRATION OR LIMIT BIOAVAILABILITY.

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL RECOMMENDATIONS BASED ON MATERIAL AS SUPPLIED. DISPOSAL MUST BE IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND MATERIAL CHARACTERISTICS AT TIME OF DISPOSAL.

DISPOSAL RECOMMENDATIONS:

PRODUCT IS SUITABLE FOR BURNING IN AN ENCLOSED CONTROLLED BURNER FOR FUEL VALUE OR DISPOSAL BY SUPERVISED INCINERATION AT VERY HIGH TEMPERATURES TO PREVENT FORMATION OF UNDESIRABLE COMBUSTION PRODUCTS. PROTECT THE ENVIRONMENT. DISPOSE OF USED OIL AT DESIGNATED SITES. MINIMIZE SKIN CONTACT. DO NOT MIX USED OILS WITH SOLVENTS, BRAKE FLUIDS OR COOLANTS.

REGULATORY DISPOSAL INFORMATION:

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 AS HAZARDOUS WASTES. IT DOES NOT EXHIBIT THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSITIVITY OR REACTIVITY AND IS NOT FORMULATED WITH CONTAMINANTS AS DETERMINED BY THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP). HOWEVER, USED PRODUCT MAY BE REGULATED.

EMPTY CONTAINER WARNING:**EMPTY CONTAINER WARNING (WHERE APPLICABLE):**

EMPTY CONTAINERS MAY CONTAIN RESIDUE AND CAN BE DANGEROUS. DO NOT ATTEMPT TO REFILL OR CLEAN CONTAINERS WITHOUT PROPER INSTRUCTIONS. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED AND SAFELY STORED UNTIL APPROPRIATELY RECONDITIONED OR DISPOSED. EMPTY CONTAINERS SHOULD BE TAKEN FOR RECYCLING, RECOVERY, OR DISPOSAL THROUGH SUITABLY QUALIFIED OR LICENSED CONTRACTOR AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT): NOT REGULATED FOR LAND TRANSPORT

LAND (TDG): NOT REGULATED FOR LAND TRANSPORT

SEA (IMDG): NOT REGULATED FOR SEA TRANSPORT ACCORDING TO IMDG-CODE

MARINE POLLUTANT: NO

AIR (IATA): NOT REGULATED FOR AIR TRANSPORT

SECTION 15 REGULATORY INFORMATION



OSHA HAZARD COMMUNICATION STANDARD:

THIS MATERIAL IS CONSIDERED HAZARDOUS IN ACCORDANCE WITH OSHA HAZCOM 2012, 29 CFR 1910.1200.

LISTED OR EXEMPT FROM LISTING/NOTIFICATION ON THE FOLLOWING CHEMICAL INVENTORIES:

AICS, DSL, IECSC, KECI, PICCS, TSCA

EPCRA SECTION 302:

THIS MATERIAL CONTAINS NO EXTREMELY HAZARDOUS SUBSTANCES.

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

SARA (313) TOXIC RELEASE INVENTORY:

THIS MATERIAL CONTAINS NO CHEMICALS SUBJECT TO THE SUPPLIER NOTIFICATION REQUIREMENTS OF THE SARA 313 TOXIC RELEASE PROGRAM.

THE FOLLOWING INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME	CAS NUMBER	LIST CITATIONS
DIPHENYLAMINE	122-39-4	18
HYDROTREATED LIGHT PARAFFINIC DISTILLATES, PETROLEUM	64742-55-8	1, 4, 17, 18

REGULATORY LISTS SEARCHED:

1 = ACGIH ALL
 2 = ACGIH A1
 3 = ACGIH A2
 4 = OSHA Z
 5 = TSCA 4
 6 = TSCA 5A2
 7 = TSCA 5E
 8 = TSCA 6
 9 = TSCA 12B
 10 = CA P65 CARC
 11 = CA P65 REPRO
 12 = CA RTK
 13 = IL RTK
 14 = LA RTK
 15 = MI 293
 16 = MN RTK
 17 = NJ RTK
 18 = PA RTK
 19 = RI RTK

CODE KEY:

CARC=CARCINOGEN;

REPRO=REPRODUCTIVE

SECTION 16 OTHER INFORMATION



N/D = NOT DETERMINED,

N/A = NOT APPLICABLE

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (FOR INFORMATION ONLY):

H301: TOXIC IF SWALLOWED; ACUTE TOX ORAL, CAT 3

H302: HARMFUL IF SWALLOWED; ACUTE TOX ORAL, CAT 4

H304: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS; ASPIRATION, CAT 1

H311: TOXIC IN CONTACT WITH SKIN; ACUTE TOX DERMAL, CAT 3

H314(1B):

CAUSES SEVERE SKIN BURNS AND EYE DAMAGE; SKIN CORR/IRRITATION, CAT 1B

H317: MAY CAUSE ALLERGIC SKIN REACTION; SKIN SENSITIZATION, CAT 1

H330(2): FATAL IF INHALED; ACUTE TOX INH, CAT 2

H331: TOXIC IF INHALED; ACUTE TOX INH, CAT 3

H373:

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE; TARGET ORGAN, REPEATED, CAT 2

H400: VERY TOXIC TO AQUATIC LIFE; ACUTE ENV TOX, CAT 1

H410:

VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS; CHRONIC ENV TOX, CAT 1

H413:

MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE; CHRONIC ENV TOX, CAT 4

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

UPDATES MADE IN ACCORDANCE WITH IMPLEMENTATION OF GHS REQUIREMENTS.

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE, TO THE BEST OF EXXONMOBIL'S KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE ISSUED. YOU CAN CONTACT EXXONMOBIL TO INSURE THAT THIS DOCUMENT IS THE MOST CURRENT AVAILABLE FROM EXXONMOBIL. THE INFORMATION AND RECOMMENDATIONS ARE OFFERED FOR THE USER'S CONSIDERATION AND EXAMINATION. IT IS THE USER'S RESPONSIBILITY TO SATISFY ITSELF THAT THE PRODUCT IS SUITABLE FOR THE INTENDED USE. IF BUYER REPACKAGES THIS PRODUCT, IT IS THE USER'S RESPONSIBILITY TO INSURE PROPER HEALTH, SAFETY AND OTHER NECESSARY INFORMATION IS INCLUDED WITH AND/OR ON THE CONTAINER. APPROPRIATE WARNINGS AND SAFE-HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS. ALTERATION OF THIS DOCUMENT IS STRICTLY PROHIBITED. EXCEPT TO THE EXTENT REQUIRED BY LAW, RE-PUBLICATION OR RETRANSMISSION OF THIS DOCUMENT, IN WHOLE OR IN PART, IS NOT PERMITTED. THE TERM, "EXXONMOBIL" IS USED FOR CONVENIENCE, AND MAY INCLUDE ANY ONE OR MORE OF EXXONMOBIL CHEMICAL COMPANY, EXXON MOBIL CORPORATION, OR ANY AFFILIATES IN WHICH THEY DIRECTLY OR INDIRECTLY HOLD ANY INTEREST.

INTERNAL USE ONLY:

MHC: 0B, 0B, 0, 0, 0, 0

PPEC: C

DGN: 7009565XUS (1017953)

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