

Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 Issue Date: 26 Oct 2022 SDS Number:7219914XCN

Version: 1.00

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: MOBILGARD 1 HSD 5W-40

Product Description: Synthetic Base Stocks and Additives

Product Code: 201540106410
Recommended Use: Engine oil

COMPANY IDENTIFICATION

Supplier: ExxonMobil (China) Investment Co., Ltd.

17/F., Metro Tower 30 Tian Yao Qiao Road Shanghai 200030 China

24 Hour Emergency Telephone (+86) 0532-83889090 Supplier General Contact (+86) 021-34116000

E-Mail consumerservice@mobil.com.cn

FAX (+86) 021-23515968

SECTION 2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Physical State: Liquid Colour: Amber Odour: Characteristic

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

Other hazard information:



Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 SDS Number:7219914XCN
Issue Date: 26 Oct 2022 Version:1.00

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

No significant hazards.

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
ALKARYLAMINE	36878-20-3	1 - < 5%	Н316
ALKYL PHENOL	125643-61-0	1 - < 5%	H413
CATALYTIC DE WAXED HEAVY PARAFFINIC OIL (PETROLEUM)	64742-70-7	1 - < 5%	H304
DISTILLATES, HEAVY, C18-50 - BRANCHED, CYCLIC AND LINEAR	848301-69-9	40 - < 50%	Н304
LUB OILS (PET), HYDROTREATED NEUTRAL OIL-BASEDC20-50	72623-87-1	1 - < 5%	Н304
LUBRICATING OILS (PETROLEUM), HYDROTREATED NEUTRAL OIL-BASED	72623-86-0	1 - < 5%	H304
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	5 - < 10%	H304
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	64742-65-0	1 - < 5%	H304
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	64742-56-9	1 - < 5%	H304
ZINC ALKYL DITHIOPHOSPHATE	113706-15-3	1 - < 2.5%	Н303, Н315, Н318, Н401,
			H411

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4 FIRST AID MEASURES

FIRST AID: 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.



Product Name: MOBILGARD 1 HSD 5W-40

 Revision Date:
 27 Oct 2022
 SDS Number: 7219914XCN

 Issue Date:
 26 Oct 2022
 Version: 1.00

SKIN CONTACT

Wash contact areas with soap and water. 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.

IMPORTANT SYMPTOMS AND HEALTH EFFECTS

Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.

ADVICE TO PROTECT RESCUER

Please refer to Section 8 for personal protection information.

NOTE TO PHYSICIAN

The need to have special means for providing specific and immediate medical treatment available in the workplace is not expected.

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

SPECIAL HAZARD WHEN ON FIRE

In case of fire, see below for hazardous combustion products. Containers exposed to excessive heat from a fire may rupture.

FIRE FIGHTING INSTRUCTIONS AND PROTECTIVE MEASURES

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters 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.



Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 SDS Number:7219914XCN
Issue Date: 26 Oct 2022 Version:1.00

Hazardous Combustion Products: Aldehydes, Incomplete combustion products, Oxides of carbon,

Smoke, Fume, Sulphur oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: >215 C (419 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.

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.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so 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.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid contact with used product. Prevent small spills and leakage to avoid slip hazard. Material



Product Name: MOBILGARD 1 HSD 5W-40

 Revision Date:
 27 Oct 2022
 SDS Number:7219914XCN

 Issue Date:
 26 Oct 2022
 Version:1.00

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 earthing procedures. However, bonding and earthing 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 type of container used to store the material may affect 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/S	tandard	Note	Source	Year
CATALYTIC DE WAXED HEAVY PARAFFINIC OIL (PETROLEUM)	Inhalabl e	TWA	5 mg/m3		ACGIH	2020
	fraction .					
LUB OILS (PET), HYDROTREATED NEUTRAL OIL-BASEDC20-50	Inhalabl e fraction	TWA	5 mg/m3		ACGIH	2020
LUBRICATING OILS (PETROLEUM), HYDROTREATED NEUTRAL OIL-BASED	Inhalabl e fraction	TWA	5 mg/m3		ACGIH	2020
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	Inhalabl e fraction .	TWA	5 mg/m3		ACGIH	2020
SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE	Inhalabl e fraction .	TWA	5 mg/m3		ACGIH	2020
SOLVENT DEWAXED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	Inhalabl e fraction	TWA	5 mg/m3		ACGIH	2020



Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 SDS Number:7219914XCN
Issue Date: 26 Oct 2022 Version:1.00

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).

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

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. Particulate filter when appropriate.

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/vapour 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:

No protection is ordinarily required under normal conditions of use. Nitrile, Viton

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:

No skin protection is ordinarily required under normal conditions of use. In accordance



Product Name: MOBILGARD 1 HSD 5W-40

 Revision Date:
 27 Oct 2022
 SDS Number: 7219914XCN

 Issue Date:
 26 Oct 2022
 Version: 1.00

with good industrial hygiene practices, precautions should be taken to avoid skin contact.

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

Colour: Amber

Odour: Characteristic
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15.6 C): 0.853

Flash Point [Method]: >215 C (419 F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.9 UEL: 7.0

Flammability (Solid, Gas): N/A Autoignition Temperature: N/D

Boiling Point / Range: > 316 C (600 F) Vapour Density (Air = 1): > 2 at 101 kPa

Vapour Pressure: < 0.013 kPa (0.1 mm Hg) at 20 $^{\circ}$ 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: 83.9 cSt (83.9 mm2/sec) at 40 C | 13.9 cSt (13.9 mm2/sec) at 100 C [ASTM D 445]

Freezing Point: N/D Melting Point: N/A

Decomposition Temperature: N/D

Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION



Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 SDS Number:7219914XCN
Issue Date: 26 Oct 2022 Version:1.00

Pour Point: -48 C (-54 F)

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

<u>Hazard Class</u>	Conclusion / Remarks
Inhalation	
Acute Toxicity: No end point data for	Minimally Toxic. Based on assessment of the components.
material.	
Irritation: No end point data for	Negligible hazard at ambient/normal handling temperatures.
material.	
Ingestion	
Acute Toxicity: No end point data for	Minimally Toxic. Based on assessment of the components.
material.	
Skin	
Acute Toxicity: No end point data for	Minimally Toxic. Based on assessment of the components.
material.	
Skin Corrosion/Irritation: No end point	Negligible irritation to skin at ambient temperatures.
data for material.	Based on assessment of the components.
Еуе	
Serious Eye Damage/Irritation: No end	May cause mild, short-lasting discomfort to eyes. Based on
point data for material.	assessment of the components.
Sensitisation	
Respiratory Sensitization: No end point	Not expected to be a respiratory sensitizer.
data for material.	
Skin Sensitization: No end point data	Not expected to be a skin sensitizer. Based on assessment
for material.	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	Not expected to be a germ cell mutagen. Based on assessment
data for material.	of the components.
Carcinogenicity: No end point data for	Not expected to cause cancer. Based on assessment of the



Product Name: MOBILGARD 1 HSD 5W-40

 Revision Date:
 27 Oct 2022
 SDS Number: 7219914XCN

 Issue Date:
 26 Oct 2022
 Version: 1.00

material.	components.
Reproductive Toxicity: No end point	Not expected to be a reproductive toxicant. Based on
data for material.	assessment of the components.
Lactation: No end point data for	Not expected to cause harm to breast-fed children.
material.	
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for	Not expected to cause organ damage from a single exposure.
material.	
Repeated Exposure: No end point data	Not expected to cause organ damage from prolonged or
for material.	repeated exposure. Based on assessment of the components.

OTHER INFORMATION

For the product itself:

Diesel engine oils: Not carcinogenic in animals tests. Used and unused diesel engine oils did not produce any carcinogenic effects in chronic mouse skin painting studies. Oils that are used in gasoline engines may become hazardous and display the following properties: Carcinogenic in animal tests. Caused mutations in vitro. Possible allergen and photoallergen. Contains polycyclic aromatic compounds (PAC) from combustion products of gasoline and/or thermal degradation products.

Contains:

Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitising in test animals and humans.

IARC Classification:

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = IARC 1 2 = IARC 2A 3 = IARC 2B

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

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.



SDS Number:7219914XCN

Referring to GB/T 16483 and GB/T 17519

Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 Issue Date: 26 Oct 2022

Version:1.00

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. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

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.

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

China List of Dangerous Goods (GB 12268 - 2012): Not Regulated for Land Transport

INTERNATIONAL CLASSIFICATION FOR 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

This material is not considered hazardous according to The General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009).

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

The General Rules for preparation of precautionary label for Chemicals (GB 15258-2009): Not



Product Name: MOBILGARD 1 HSD 5W-40

 Revision Date:
 27 Oct 2022
 SDS Number: 7219914XCN

 Issue Date:
 26 Oct 2022
 Version: 1.00

Regulated

Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste: See Disposal Considerations section.

Listed or exempt from listing/notification on the following chemical inventories: AIIC, DSL, ENCS, IECSC, ISHL, KECI, PICCS, TCSI, TSCA

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):

H303: May be harmful if swallowed; Acute Tox Oral, Cat 5

H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H316: Causes mild skin irritation; Skin Corr/Irritation, Cat 3

H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

H413: May cause long lasting harmful effects to aquatic life; Chronic Env Tox, Cat 4

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

No revision information

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, republication 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. (AP Core)

DGN: 7219914XCN (1024783)



SDS Number:7219914XCN

Version:1.00

Referring to GB/T 16483 and GB/T 17519

Product Name: MOBILGARD 1 HSD 5W-40

Revision Date: 27 Oct 2022 Issue Date: 26 Oct 2022
