

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: MOBILITH SHC 221

Product Description: Synthetic Base Stocks and Additives

Product Code: 2015A0204045, 643965-00

Recommended Use: Grease

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) 021-24076000

E-Mail

lubricants-sds@exxonmobil.com

FAX

400 1200 526

SECTION 2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Physical State: Solid **Form:** Semi-fluid **Colour:** White to Off-White **Odour:** Characteristic
H402: Harmful to aquatic life.

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

The hazard classification for this material is in accordance with the General Rules for Classification and Hazard Communication of Chemicals (GB 13690-2009).

CLASSIFICATION:

Acute aquatic toxicant: Category 3.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

LABEL:**Symbol:** No Symbol**Signal Word:** No Signal Word**Hazard Statements:**

Environmental: H402: Harmful to aquatic life.

Precautionary Statements:

Prevention: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P273: Avoid release to the environment. P280: Wear protective gloves and clothing.

Response: P308 + P313: IF exposed or concerned: Get medical advice/attention.

Storage: P405: Store locked up.

Disposal: P501: Dispose of contents and container in accordance with local regulations.

Other hazard information:**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 additional 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
1-NAPHTHALENAMINE, N-PHENYL-AR-(1,1,3,3-TETRAMETHYL BUTYL)-	68259-36-9	1 - < 5%	H413
1H-IMIDAZOLE-1-ETHANOL, 2-(8-HEPTADECENYL)-4,5-DIHYDRO-	95-38-5	0.1 - < 0.25%	H302, H314(1C), H373, H400(M factor 10), H410(M

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

			factor 1)
9-OCTADECENOIC ACID (Z)-, REACTION PRODUCTS WITH DIHYDRO-3-(DODECENYL)-2,5-FURANDIONE AND TRIETHYLENETETRAMINE	68478-81-9	0.1 - < 1%	H315, H361(D), H361(F), H413
HEXANEDIOIC ACID, DILITHIUM SALT	18621-94-8	1 - < 5%	H302, H402
METHYLENE BIS(DIBUTYLDITHIOCARBAMATE)	10254-57-6	1 - < 5%	None

* 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

Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

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

Seek immediate medical attention.

IMPORTANT SYMPTOMS AND HEALTH EFFECTS

Headache, dizziness, drowsiness, nausea and other CNS 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.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

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.

Hazardous Combustion Products: Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulphur oxides

FLAMMABILITY PROPERTIES

Flash Point [Method]: >204 C (400 F) [EST. FOR OIL, ASTM D-92 (COC)]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

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

Prevent entry into waterways, sewers, basements or confined areas.

SPILL MANAGEMENT

Land Spill: Scrape up spilled material with shovels into a suitable container for recycle or disposal.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface

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 all personal contact. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is not a static accumulator.

STORAGE

Do not store in open or unlabelled containers. Keep away from incompatible materials.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

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 protection is ordinarily required under normal conditions of use and with adequate ventilation.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

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:

Chemical resistant gloves are recommended. Nitrile

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: Solid
Form: Semi-fluid
Colour: White to Off-White
Odour: Characteristic
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density: 0.909

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number: 7082862XCN

Version: 1.03

Flash Point [Method]: >204 C (400 F) [EST. FOR OIL, ASTM D-92 (COC)]
 Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
 Flammability (Solid, Gas): N/A
 Autoignition Temperature: N/D
 Boiling Point / Range: > 316 C (600 F) [Estimated]
 Vapour Density (Air = 1): N/D
 Vapour Pressure: < 0.013 kPa (0.1 mm Hg) at 20 ° C [Estimated]
 Evaporation Rate (n-butyl acetate = 1): N/D
 pH: N/A
 Log Pow (n-Octanol/Water Partition Coefficient): > 3.5 [Estimated]
 Solubility in Water: Negligible
 Viscosity: 221 cSt (221 mm²/sec) at 40 C
 Freezing Point: N/D
 Melting Point: N/D
 Decomposition Temperature: N/D
 Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

NOTE: Most physical properties above are for the oil component in the material.

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

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.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

Ingestion	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
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.
Sensitisation	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. 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.	Contains a substance that may 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.

TOXICITY FOR SUBSTANCES

NAME	ACUTE TOXICITY
1H-IMIDAZOLE-1-ETHANOL, 2-(8-HEPTADECENYL)-4,5-DIHYDRO-	Oral Lethality: LD 50 1265 mg/kg (Rat)
HEXANEDIOIC ACID, DILITHIUM SALT	Oral Lethality: LD 50 1098 mg/kg (Rat)

OTHER INFORMATION

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.

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

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 -- 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.

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.

NATIONAL CATALOGUE OF HAZARDOUS WASTES

HW49 - Other Waste Materials

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

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number:7082862XCN

Version:1.03

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**

The hazard classification for this material is in accordance with the General Rules 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):
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 (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA):
AIIC, IECSC, ISHL, KECI, TCSI, TSCA

Special Cases:

Inventory	Status
ENCS	Restrictions Apply
NDSL	Restrictions Apply

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):

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H314(IC): Causes severe skin burns and eye damage; Skin Corr/Irritation, Cat 1C

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

H361(D): Suspected of damaging the unborn child; Repro Tox, Cat 2 (Develop)

H361(F): Suspected of damaging fertility; Repro Tox, Cat 2 (Fertility)

H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2

Product Name: MOBILITH SHC 221

Revision Date: 20 May 2021

Issue Date: 4 Jan 2013

SDS Number: 7082862XCN

Version: 1.03

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H402: Harmful to aquatic life; Acute Env Tox, Cat 3

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:

Composition: Component Table information was modified.

Section 11 Substance Toxicology table information was modified.

Section 15: National Chemical Inventory Listing information was modified.

Section 16: HCode Key information was modified.

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.

(AP Core)

DGN: 7082862XCN (1009044)
