SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

PRODUCT

Product Name: **MOBILTEMP SHC 100**
Product Description: Synthetic Base Stocks and Additives
Product Code: 2015A0204530, 400002, 640201-60
Intended Use: Grease

COMPANY IDENTIFICATION

Supplier: **EXXONMOBIL LUBRICANTS & SPECIALTIES EUROPE, A DIVISION OF EXXONMOBIL PETROLEUM & CHEMICAL, BVBA (EMPC)**
POLDERDIJKWEG
B-2030 Antwerpen
Belgium

24 Hour Environmental / Health Emergency Telephone (UK) 01372 222 000 / (IRELAND) 44 1372 222 000
E-Mail SDS-UK@EXXONMOBIL.COM

SECTION 2 HAZARDS IDENTIFICATION

This material is dangerous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION: | R52/53 |

HEALTH HAZARDS

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

ENVIRONMENTAL HAZARDS

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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 regulated as a preparation.

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	EINECS / ELINCS	Concentration *	Symbols/Risk Phrases

1,2,3-PROPANETRIOL	56-81-5	200-289-5	1 - 5%	None
1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-	115-77-5	204-104-9	1 - 5%	None
N-PHENYL-1-NAPHTHYLAMINE	90-30-2	201-983-0	0.1 - 1%	Xn;R22, Xi;R43, N;R50/53
2,6-DI-TERT-BUTYLPHENOL	128-39-2	204-884-0	< 2.5%	Xi;R36/38, N;R50/53
GLYCENE, N-METHYL-N-(1-OXO-9-OCTADECENYL)-, (Z)-	110-25-8	203-749-3	0.1 - 1%	Xi;R38, Xi;R41, N;R50/53
QUINOLINE,1,2-DIHYDRO-2,2,4-TRIMETHYL-,HOMOPOLYMER	26780-96-1		1 - 5%	R52/53

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

SECTION 4 FIRST AID MEASURES

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. 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 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: Smoke, Fume, Aldehydes, Sulphur oxides, Incomplete combustion products, Oxides of carbon

FLAMMABILITY PROPERTIES

Flash Point [Method]: >204C (399F) [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.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Scrape up spilled material with shovels into a suitable container for recycle or disposal.

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.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas. For Large Spills: Cover spill with plastic sheet or tarpaulin to minimise spreading.

SECTION 7 HANDLING AND STORAGE

HANDLING

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.

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	Year
1,2,3-PROPANETRIOL	Mist.	TWA	10 mg/m3			UK EH40	2007

1,2,3-PROPANETRIOL	Mist.	TWA	10 mg/m3			ACGIH	2009
1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-	Inhalable dust.	STEL	20 mg/m3			UK EH40	2007
1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-	Inhalable dust.	TWA	10 mg/m3			UK EH40	2007
1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-	Respirable dust.	TWA	4 mg/m3			UK EH40	2007
1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-		TWA	10 mg/m3			ACGIH	2009

Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s):

UK Health and Safety Executive (HSE)

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.

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.

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 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

See Sections 6, 7, 12, 13.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Solid
Form: Semi-fluid
Colour: Brown
Odour: Characteristic
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 C): 0.9
Flash Point [Method]: >204C (399F) [EST. FOR OIL, ASTM D-92 (COC)]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: N/D
Boiling Point / Range: N/D
Vapour Density (Air = 1): N/D
Vapour Pressure: < 0.013 kPa (0.1 mm Hg) at 20°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: 100 cSt (100 mm2/sec) at 40°C [Base oil] | >14 cSt (14 mm2/sec) at 100C
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

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

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.

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.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: LC50 > 5000 mg/m3	Minimally Toxic. Based on test data for structurally similar materials.
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures. Based on assessment of the components.
Ingestion	
Toxicity: LD50 > 5000 mg/kg	Minimally Toxic. Based on assessment of the components.
Skin	
Toxicity: LD50 > 5000 mg/kg	Minimally Toxic. Based on assessment of the components.
Irritation: Data available.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

CHRONIC/OTHER EFFECTS

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.

Additional information is available by request.

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

A component -- Low water solubility, expected to sink and migrate into the sediment. Expected to partition to sediment and wastewater solids.

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:

Majority of components -- Expected to be inherently biodegradable
Components -- Expected to be persistent.

ECOLOGICAL DATA

Component	Acute Aquatic Toxicity
N-PHENYL-1-NAPHTHYLAMINE	L(E)C50 >0.1 - 1 mg/L
2,6-DI-TERT-BUTYLPHENOL	L(E)C50 >0.1 - 1 mg/L
GLYCENE, N-METHYL-N-(1-OXO-9-OCTADECENYL)-, (Z)-	L(E)C50 >0.1 - 1 mg/L

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.

REGULATORY DISPOSAL INFORMATION

European Waste Code: 12 01 12

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. 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).

This material is considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.

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 (ADR/RID): Not Regulated for Land Transport

INLAND WATERWAYS (ADNR/ADN): Not Regulated for Inland Waterways Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

SECTION 15 REGULATORY INFORMATION

Material is dangerous as defined by the EU Dangerous Substances/Preparations Directives.

CLASSIFICATION: Dangerous for the environment.

EU LABELING: No symbol required.

Nature of Special Risk: R52/53; Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Advice: S61; Avoid release to the environment. Refer to special instructions/safety data sheets.

Contains: N-PHENYL-1-NAPHTHYLAMINE May produce an allergic reaction.

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Complies with the following national/regional chemical inventory requirements: IECSC, EINECS, PICCS, TSCA

Special Cases:

Inventory	Status
KECI	Restrictions Apply

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable
KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):
R22; Harmful if swallowed.
R36; Irritating to eyes.
R38; Irritating to skin.
R41; Risk of serious damage to eyes.
R43; May cause sensitisation by skin contact.
R50/53; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53; Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:
Revision Changes:
Section 11: Acute Toxicity Table Header was modified.
Section 09: Physical State was modified.
Section 09: Colour was modified.

Section 11: Ingestion Acute Lethality - Header was modified.
Section 11: Inhalation - Header was modified.
Section 09: Evaporation Rate - Header was modified.
Section 05: Hazardous Combustion Products was modified.
Composition: Component Table was modified.
Section 06: Accidental Release - Spill Management - Water was modified.
Section 09: Viscosity was modified.
Section 09: Viscosity was modified.
Section 14: Land (ADR/RID) - Header was modified.
Section 14: Inland Waterways (ADNR) - Header was modified.
Section 14: Sea (IMDG) - Header was modified.
Section 14: Air (IATA) - Header was modified.
Section 14: Sea (IMDG) - Default was modified.
Section 14: Air (IATA) - Default was modified.
Section 14: LAND (ADR) - Default was modified.
Section 14: INLAND WATERWAYS (ADNR) - Default was modified.
Hazard Identification: Hazards Note was modified.
Section 08: Exposure Limits Table was modified.
Section 09: Section 9 Footnotes was modified.
Section 09: Oxidizing Properties was modified.
Section 01: Company Contact Methods Sorted by Priority was modified.
Section 14: IATA Footnote was deleted.

Internal Use Only
MHC: 0B, 0B, 0, 0, 0, 0 PPEC: A

DGN: 2009815XGB (553427)