Synfluid® mPAO 100 cSt

Version 2.0 Revision Date 2017-07-10

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information

Product Name : Synfluid® mPAO 100 cSt
Material : 1116564, 1106295, 1106303

Company : Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Local : CHEVRON PHILLIPS CHEMICALS ASIA PTE. LTD.
C/O DONG WOO CORPORATION
#B-2601,JEONGJAIL-RO,
BUNDANG-GU,SEONGNAMI-SI,
GYEONGGI-DO,13557
SOUTH KOREA
Telephone no.: +612-9186-1132

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group
E-mail address : SDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
Standards for classification and labeling of chemical substances and material safety data sheet (ministry of employment and labor public notice No. 2013-37) (GHS 2009)

Classification

This material is not classified as hazardous under the Article 39 Paragraph 1 of the Industrial Safety and Health Act (ISHA). It is not regulated for the MSDS creation and labeling by the provision of Article 41 Paragraph 1 of the ISHA.

Labeling

This material is not classified as hazardous under the Article 39 Paragraph 1 of the Industrial Safety and Health Act (ISHA). It is not regulated for the MSDS creation and labeling by the provision of Article 41 Paragraph 1 of the ISHA.

SECTION 3: Composition/information on ingredients

Synonyms : Polyalphaolefin; PAO

Molecular formula : Polymer

Chemical name	CAS-No.	Concentration	KECI Number
1-Octene Homopolymer, Hydrogenated	70693-43-5	100%	

SECTION 4: First aid measures

General advice : Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water. Wash contaminated clothing before re-use.

In case of eye contact : Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

SECTION 5: Firefighting measures

Flash point : 255 °C (491 °F)

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during fire fighting : Exposure to decomposition products may be a hazard to health.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire and explosion protection	:	Normal measures for preventive fire protection.
Hazardous decomposition products	:	Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions	:	Material can create slippery conditions.
Environmental precautions	:	Clean contaminated floors and objects thoroughly while observing environmental regulations.
Methods for cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Handling

Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers	:	Electrical installations / working materials must comply with the technological safety standards.
Advice on common storage	:	No materials to be especially mentioned.

SECTION 8: Exposure controls/personal protection

Engineering measures

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection	:	Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure.
Hand protection	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time

		which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	:	Safety glasses. Eye wash bottle with pure water.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Lightweight protective clothing.
Hygiene measures	:	General industrial hygiene practice. Prevent vapor buildup by providing adequate ventilation during and after use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form	:	Oil
Physical state	:	Liquid
Color	:	clear, light

Safety data

Flash point	:	255 °C (491 °F)
Ignition temperature	:	310 °C (590 °F)
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Thermal decomposition	:	No data available
Molecular formula	:	Polymer
Molecular weight	:	Varies
pH	:	No data available
Freezing point	:	-44 °C (-47 °F)
Boiling point/boiling range	:	> 250 °C (> 482 °F)
Density	:	0.84 g/cm3
Water solubility	:	Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic	:	1014 cSt at 40 °C (104 °F)

SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Thermal decomposition : No data available

Hazardous decomposition products : Carbon oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Synfluid® mPAO 100 cSt
Acute oral toxicity : LD50: > 5,000 mg/kg
Species: Rat
Information given is based on data obtained from similar substances.

Synfluid® mPAO 100 cSt
Acute inhalation toxicity : LC50: > 5 mg/l
Exposure time: 4 h
Species: Rat
Test atmosphere: dust/mist
Information given is based on data obtained from similar substances.

Synfluid® mPAO 100 cSt
Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rabbit
Information given is based on data obtained from similar substances.

Synfluid® mPAO 100 cSt
Skin irritation : No skin irritation

Synfluid® mPAO 100 cSt
Eye irritation : No eye irritation

Synfluid® mPAO 100 cSt
Sensitization : Did not cause sensitization on laboratory animals.

SECTION 12: Ecological information

Elimination information (persistence and degradability)

Biodegradability : This material is not expected to be readily biodegradable.

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

Regulation under the Occupational Safety and Health Act

A Material Safety Datasheet (MSDS) for this product is not required according to article 41 of the ISHA.

Regulation		Chemical name	Threshold limits
Harmful Substances Prohibited from Manufacturing	:	Not relevant	
		Not relevant	
Harmful Substances Required Permission for Manufacture	:	Not relevant	
		Not relevant	

Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act

Regulation		Chemical name	Threshold limits
Toxic Chemicals	:	Not relevant	
		Not relevant	
Prohibited Chemicals	:	Not relevant	
		Not relevant	
Observational chemicals	:	Not relevant	
		Not relevant	
Restricted Chemicals	:	Not relevant	
		Not relevant	
Toxic Release Inventory	:	Not relevant	
		Not relevant	

Dangerous Substances Safety Management Act

Dangerous Substances Safety Management Act : Not relevant

Not relevant

Notification status

Europe REACH : This mixture contains only ingredients which have been

		registered according to Regulation (EU) No. 1907/2006 (REACH).
Switzerland CH INV	:	On the inventory, or in compliance with the inventory
United States of America (USA) TSCA	:	On TSCA Inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Japan ENCS	:	Not in compliance with the inventory
Korea KECI	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
China IECSC	:	This product contains one or more substances that have been notified under New Substances Notification laws. However, only CPChem and other independent notifiers are approved to be the importers of record.

SECTION 16: Other information

Further information

NSF H1 Registered, meets USDA 1998 H1 Guidelines

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and

			Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		