

Version 1.12 Revision Date 2025-10-22

MSDS number: AA00974-0000000105

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

Product Name : Synfluid® PAO 6 cSt HVI

Material : 10691074, 1113306, 1113305, 10691818

Recommended use of the

product

: Synthetic Lubricants

Restrictions on use : None known.

This material should not be used for purposes other than the

identified uses in section 1 without expert advice.

Address : Chevron Phillips Chemical Company LP

9500 Lakeside Blvd. The Woodlands, TX 77381

Address : 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

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

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

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Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico "Agostino Gemelli", Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico "Umberto I" Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera "Antonio Cardarelli" Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera "Papa Giovanni XXIII" Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)

Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000 Norway: 22 59 13 00 (24 hours/day, 7 days/week)

Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24

hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

Organization that prepared : Product Safety and Toxicology Group

the SDS

E-mail address : SDS@CPChem.com Website : www.CPChem.com

Appointees : 회사명: 리이치24시코리아㈜.

주소: 서울특별시 강남구 강남대로 94길 34,4층

전화: +82-02-6245-1610

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#### **SECTION 2: Hazards identification**

#### **Hazard classification**

Standards for classification and labeling of chemical substances and material safety data sheet (ministry of employment and labor public notice No. 2020-130)

#### Classification

Not a hazardous substance or mixture.

#### Warning label elements including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do

not result in classification

None

## **SECTION 3: Composition/information on ingredients**

Synonyms : Polyalphaolefin

PAO

Molecular formula : UVCB, UVCB

#### **SECTION 4: First aid measures**

General advice : No hazards which require special first aid measures.

In case of eye contact : Remove contact lenses. Protect unharmed eye. If eye

irritation persists, consult a specialist.

If inhaled : If unconscious, place in recovery position and seek medical

advice. If symptoms persist, call a physician.

If swallowed : Keep respiratory tract clear. Never give anything by mouth to

an unconscious person. If symptoms persist, call a physician.

#### Other cautions for Doctors

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**Symptoms** : No information available.

Risks No information available.

Treatment Treat symptomatically.

#### **SECTION 5: Firefighting measures**

Flash point 246-271°C (475-520°F)

Method: Cleveland Open Cup

Autoignition temperature 351°C (664°F)

Suitable extinguishing

media

: Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Unsuitable extinguishing

media

: High volume water jet.

Specific hazards during fire

fighting

: Do not use a solid water stream as it may scatter and spread

fire. Cool closed containers exposed to fire with water spray.

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**

: Use personal protective equipment. Ensure adequate Personal precautions

ventilation. Evacuate personnel to safe areas. Material can

create slippery conditions.

Environmental precautions : No special environmental precautions required.

: Wipe up with absorbent material (e.g. cloth, fleece). Keep in Methods for cleaning up

suitable, closed containers for disposal.

#### **SECTION 7: Handling and storage**

#### Handling

For personal protection see section 8. Smoking, eating and Advice on safe handling

drinking should be prohibited in the application area.

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Advice on protection against fire and explosion

: Normal measures for preventive fire protection.

#### Secure storage

Requirements for storage areas and containers
Uses advised against

: Electrical installations / working materials must comply with the

technological safety standards.

: None known.

This material should not be used for purposes other than the

identified uses in section 1 without expert advice.

Advice on common storage : No materials to be especially mentioned.

Specific Use : Synthetic Lubricants

#### SECTION 8: Exposure controls/personal protection

## Chemical exposure standards, biological exposure standards, etc.

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. 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 : If ventilation or other engineering controls are not adequate to

maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved

respirator may be appropriate.

Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.

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.

Skin and body protection : Choose body protection according to the amount and

concentration of the substance and the task performed at the work place. Appropriate PPE may include: Lightweight

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protective clothing.

Hygiene measures : General industrial hygiene practice.

#### **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance

Physical state : liquid
Color : Colorless
Odor : Odorless

Odor Threshold : No data available

pH : Not applicable

Pour point : <-40°C (<-40°F)

Boiling point/boiling range : >260°C (>500°F)

Flash point : 246-271°C (475-520°F)

Method: Cleveland Open Cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

No data available

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapor pressure : No data available

Solubility : Soluble in hydrocarbon solvents; insoluble in water.

Density : 6.87 - 6.96 L/G

Vapor density : No data available

Autoignition temperature : 351°C (664°F)

Decomposition temperature : No data available

No data available

Viscosity, kinematic : 29.5 cSt

at 40°C (104°F)

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Method: ASTM D 445

Molecular weight : Not applicable

## **SECTION 10: Stability and reactivity**

**Reactivity** : Stable at normal ambient temperature and pressure.

**Chemical stability** : No decomposition if stored and applied as directed.

Possibility of hazardous reactions

**Hazardous reactions** : Further information: Stable under recommended storage

conditions., No hazards to be specially mentioned.

**Conditions to avoid** : No data available.

Materials to avoid : No data available.

Thermal decomposition : No data available

No data available

**Hazardous decomposition** 

products

: Carbon oxides

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

#### **SECTION 11: Toxicological information**

#### Information on exposure routes

Synfluid® PAO 6 cSt HVI

Acute oral toxicity : LD50: > 5,000 mg/kg

Species: Rat

Information given is based on data obtained from similar

substances.

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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.

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Synfluid® PAO 6 cSt HVI

Acute dermal toxicity : I

: LD50: > 2,000 mg/kg

Species: Rat

Information given is based on data obtained from similar

substances.

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Skin corrosion or irritation

No skin irritation

Information given is based on data obtained from similar

substances.

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Eye corrosion or irritation

: No eye irritation

Information given is based on data obtained from similar

substances.

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**Respiratory Sensitization** 

: No data available

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Skin sensitization

Did not cause sensitization on laboratory animals.

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Repeated dose toxicity

Species: Rat, Male and female

Sex: Male and female

Application Route: oral gavage Dose: 0, 1000 mg/kg/day Exposure time: 28 days NOEL: 1,000 mg/kg

Method: OECD Test Guideline 407

Information given is based on data obtained from similar

substances.

Synfluid® PAO 6 cSt HVI Germ cell mutagenicity (in

vitro)

: Test Type: Ames test

Result: negative

Remarks: Information refers to the main ingredient.

Test Type: Chromosome aberration test in vitro

Result: negative

Remarks: Information refers to the main ingredient.

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Germ cell mutagenicity (in

vivo)

Test Type: Mouse micronucleus assay

Result: negative

Remarks: Information refers to the main ingredient.

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**Developmental Toxicity** 

Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar substances.

Specific Target Organ Toxicity (Single Exposure)

Not classified due to data which are conclusive although insufficient for classification.

Not classified due to data which are conclusive although

insufficient for classification.

Specific Target Organ Toxicity (Repeated Exposure)

Not classified due to data which are conclusive although insufficient for classification. Not classified due to data which are conclusive although insufficient for classification.

Synfluid® PAO 6 cSt HVI Aspiration toxicity

: No aspiration toxicity classification.

**Toxicology Assessment** 

Synfluid® PAO 6 cSt HVI CMR effects

: Carcinogenicity:

Contains no ingredient listed as a carcinogen

Mutagenicity:

Animal testing did not show any mutagenic effects.

Teratogenicity:

Did not show teratogenic effects in animal experiments.

Reproductive toxicity: No toxicity to reproduction

Synfluid® PAO 6 cSt HVI Reproductive toxicity

: Animal testing did not show any effects on fertility.
Information given is based on data obtained from similar

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substances.

Synfluid® PAO 6 cSt HVI Further information

: No data available.

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#### **SECTION 12: Ecological information**

**Ecological Toxicity** 

**Toxicity to fish** : Not a hazardous substance or mixture.

Estimated based on individual component values.

Not classified due to data which are conclusive although

insufficient for classification.

Toxicity to daphnia and other aquatic invertebrates

: Not a hazardous substance or mixture.

Estimated based on individual component values.

Not classified due to data which are conclusive although

insufficient for classification.

**Toxicity to algae** : Not a hazardous substance or mixture.

Estimated based on individual component values.

Not classified due to data which are conclusive although

insufficient for classification.

Persistence and degradabilityPersistence

and degradability

: Result: Expected to be inherently biodegradable.

Bioaccumulative : This material is not expected to bioaccumulate.

Mobility : No data available

Other adverse effects : No data available

**Ecotoxicology Assessment** 

Short-term (acute) aquatic

hazard

: This material is not expected to be harmful to aquatic

organisms.

Long-term (chronic) aquatic

hazard

: This material is not expected to be harmful to aquatic

organisms.

#### **SECTION 13: Disposal considerations**

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

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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.

Disposal precaution : 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.

UN Number	:	not regulated
UN Product Shipping Name	:	Not regulated as a dangerous good
Hazard Class	:	
Packing Group	:	Not applicable
Marine Pollutant	:	Not applicable
Special Safety Measures on Mode of Transport	:	No data available

#### **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.

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#### 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.

Other information :	Not applicable

Maritime transport in bulk according to IMO instruments

# **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 applicable	
		Not applicable	
Harmful Substances Required Permission for Manufacture	:	Not applicable	
		Not applicable	

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

Regulation		Chemical name	Threshold limits
Toxic Chemicals	:	Not applicable	
		Not applicable	
Prohibited Chemicals	:	Not applicable	
		Not applicable	
Restricted Chemicals	:	Not applicable	
		Not applicable	
Toxic Release Inventory	:	Not applicable	
		Not applicable	

**Dangerous Substances Safety Management Act** 

Dangerous Substances : Flammable liquids, Type 4 petroleums

Safety Management Act

Regulations by the Waste : Not applicable

**Management Act** 

Regulations by other domestic and foreign laws

Europe REACH This product is in full compliance according to REACH

regulation 1907/2006/EC.

United States of America (USA) On or in compliance with the active portion of the

TSCA TSCA inventory

Canada DSL All components of this product are on the Canadian

Other AICS On the inventory, or in compliance with the inventory New Zealand NZIoC On the inventory, or in compliance with the inventory Japan ENCS On the inventory, or in compliance with the inventory

Korea KECI All substances in this product were registered, notified

to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was

included on CPChem's notifications or if the Importer of

Record themselves notified the substances.

Philippines PICCS On the inventory, or in compliance with the inventory China IECSC On the inventory, or in compliance with the inventory Taiwan TCSI On the inventory, or in compliance with the inventory

Other regulations : No data available

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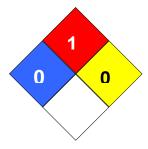
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#### **SECTION 16: Other information**

Source of data	:	
Date of initial writing	:	2020-09-10
Revision number	:	1
Last revision date	:	2025-10-22

NFPA Classification : Health Hazard: 0

Fire Hazard: 1 Reactivity Hazard: 0



#### Other information

NSF H1, HX-1 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	LD50	Lethal Dose 50%			
	Government Industrial Hygienists					
AIIC	Australian Inventory of Industrial	LOAEL	Lowest Observed Adverse Effect			
	Chemicals		Level			
DSL	Canada, Domestic Substances	NFPA	National Fire Protection Agency			
	List					
NDSL	Canada, Non-Domestic	NIOSH	National Institute for Occupational			
	Substances List		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			

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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%	ATE	Acute toxicity estimate