Synfluid® PAO 8 cSt HVI

Version 1.14 Revision Date 2023-05-18

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2020/878

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

1.1 Product identifier

Product information

Product Name : Synfluid® PAO 8 cSt HVI
Material : 1116770, 1116769, 1079706, 10603520

EC-No.Registration number

Chemical name	CAS-No. EC-No. Index No.	Legal Entity Registration number
1-Dodecene	112-41-4 203-968-4	Chevron Phillips Chemical Company LP 01-2119475509-26-0003

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant Identified Uses Supported : Lubricant

1.3 Details of the supplier of the safety data sheet

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

Local : Chevron Phillips Chemicals International N.V.
Airport Plaza (Stockholm Building)
Leonardo Da Vincilaan 19
1831 Diegem
Belgium

SDS Requests: (800) 852-5530
Responsible Party: Product Safety Group
Email:sds@cpchem.com

1.4 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)
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: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
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

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

SECTION 2: Hazards identification

2.1

Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture.

2.2

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Additional Labeling:

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 0 %

2.3

Other hazards

Results of PBT and vPvB assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 - 3.2

Substance or Mixture

Synonyms	:	PAO 8A Polyalphaolefin PAO PAO 8 cSt Blend
Molecular formula	:	Polymer

Contains no hazardous ingredients according to GHS. :

Remarks : Contains no hazardous ingredients according to GHS.

SECTION 4: First aid measures

4.1

Description of first-aid measures

General advice	:	No hazards which require special first aid measures. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Show this material safety data sheet to the doctor in attendance.
If inhaled	:	Move to fresh air in case of accidental inhalation of vapors. Consult a physician after significant exposure.
In case of skin contact	:	Remove contaminated clothing. If irritation develops, get medical attention. Wash off immediately with plenty of water.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation

persists, consult a specialist.

If swallowed : If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed
Notes to physician

Symptoms : No information available.

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

Flash point : 246-271°C (475-520°F)
Method: Cleveland Open Cup

Autoignition temperature : 351°C (664°F)

5.1
Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2
Special hazards arising from the substance or mixture

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.

5.3
Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

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

6.1
Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.

6.2

Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3

Methods and materials for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

Additional advice : No conditions to be specially mentioned.

6.4

Reference to other sections

Reference to other sections : For personal protection see section 8. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1

Precautions for safe handling
Handling

Advice on safe handling : Do not breathe vapors/dust. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

7.2

Conditions for safe storage, including any incompatibilities

Storage

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

7.3

Specific End Use

Use : Synthetic Lubricants

SECTION 8: Exposure controls/personal protection

8.2

Exposure controls
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	:	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.
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	:	Eye wash bottle with pure water. Tightly fitting safety goggles.
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	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
Protective measures	:	Wear suitable protective equipment. When using do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1

Information on basic physical and chemical properties

Appearance

Form	:	liquid
Physical state	:	liquid
Color	:	Colorless
Odor	:	Odorless

Safety data

Flash point	:	246-271°C (475-520°F) Method: Cleveland Open Cup
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Oxidizing properties	:	no
Autoignition temperature	:	351°C (664°F)
Molecular formula	:	Polymer
Molecular weight	:	Not applicable

pH	:	Not applicable
Pour point	:	<-50°C (<-58°F)
Boiling point/boiling range	:	>260°C (>500°F)
Vapor pressure	:	No data available
Density	:	6,87 - 6,96 L/G
Water solubility	:	Soluble in hydrocarbon solvents; insoluble in water.
Viscosity, kinematic	:	46,2 cSt at 40°C (104°F) Method: ASTM D 445
Relative vapor density	:	No data available
Evaporation rate	:	No data available

SECTION 10: Stability and reactivity

10.1

Reactivity : Stable at normal ambient temperature and pressure.

10.2

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

10.3

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: No dangerous reaction known under conditions of normal use.

Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

10.4

Conditions to avoid : No data available.

10.5

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

10.6

Hazardous decomposition products : Carbon oxides

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

SECTION 11: Toxicological information

11.1

Information on toxicological effects

Synfluid® PAO 8 cSt HVI
Acute oral toxicity : LD50: > 5.000 mg/kg
Species: Rat
Information given is based on data obtained from similar substances.

Synfluid® PAO 8 cSt HVI
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® PAO 8 cSt HVI
Acute dermal toxicity : LD50: > 2.000 mg/kg
Species: Rat
Information given is based on data obtained from similar substances.

Synfluid® PAO 8 cSt HVI
Skin irritation : No skin irritation
Information given is based on data obtained from similar substances.

Synfluid® PAO 8 cSt HVI
Eye irritation : No eye irritation
Information given is based on data obtained from similar substances.

Synfluid® PAO 8 cSt HVI
Sensitization : Did not cause sensitization on laboratory animals.
Information given is based on data obtained from similar substances.

Synfluid® PAO 8 cSt HVI
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 8 cSt HVI
Genotoxicity 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.

Synfluid® PAO 8 cSt HVI
Genotoxicity in vivo : Test Type: Mouse micronucleus assay
Result: negative
Remarks: Information refers to the main ingredient.

Synfluid® PAO 8 cSt HVI
Aspiration toxicity : No aspiration toxicity classification.
Toxicology Assessment

Synfluid® PAO 8 cSt HVI
Specific Target Organ Toxicity (Single Exposure) : Remarks: Not classified due to data which are conclusive although insufficient for classification. :

Synfluid® PAO 8 cSt HVI
Specific Target Organ Toxicity (Repeated Exposure) : Remarks: Not classified due to data which are conclusive although insufficient for classification. :

Synfluid® PAO 8 cSt HVI
CMR effects : Carcinogenicity:
Not classifiable as a human 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

11.2
Information on other hazards
Endocrine disrupting properties : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1
Toxicity

Ecotoxicity effects

Toxicity to fish : LL50: > 1.000 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

static test Test substance: no
Method: OECD Test Guideline 203
Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EL50: > 1.000 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Test substance: no
Method: OECD Test Guideline 202
Information given is based on data obtained from similar substances.

Toxicity to algae : NOEC: > 1.000 mg/l
Exposure time: 96 h
Species: Selenastrum capricornutum (algae)
Method: OECD Test Guideline 201
Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 125 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test substance: no
The product has low solubility in the test medium. An aqueous dispersion was tested.
Information given is based on data obtained from similar substances.

12.2
Persistence and degradability

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

12.3
Bioaccumulative potential
Elimination information (persistence and degradability)

Bioaccumulation : No data available

12.4
Mobility in soil

Mobility : No data available

12.5
Results of PBT and vPvB assessment
Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6
Endocrine disrupting properties

Endocrine disrupting properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7
Other adverse effects

Additional ecological information	:	No data available

12.8
Additional Information

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

13.1
Waste treatment methods
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.

Product	:	Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14: Transport information

14.1 - 14.7
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.

Other information	**:**	**Polyolefin (molecular weight 300+), S.T. 2, Cat.Y**

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

15.1

Safety, health and environmental regulations/legislation specific for the substance or mixture
National legislation

Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Water hazard class (Germany) : WGK 1 slightly water endangering

15.2

Chemical Safety Assessment

Components	:	dodec-1-ene	A Chemical Safety Assessment has been carried out for this substance.	203-968-4

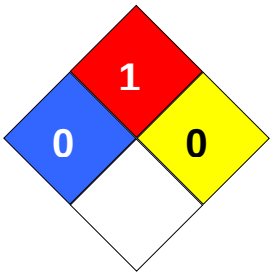
Major Accident Hazard Legislation : 96/82/EC Update: 2003
Directive 96/82/EC does not apply

Notification status

Europe REACH	:	This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).
Switzerland CH INV	:	Not in compliance with the inventory
United States of America (USA) TSCA	:	On or in compliance with the active portion of the TSCA inventory
Canada DSL	:	All components of this product are on the Canadian DSL
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

SECTION 16: Other information

NFPA Classification : Health Hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0



Further information

Legacy SDS Number : 8014

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 Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	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%	ATE	Acute toxicity estimate