

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Synfluid® Dimer C12  
Material : 1079709, 1080163, 1079650

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

Local : Chevron Phillips Chemicals International N.V.  
Brusselsesteenweg 355  
B-3090 Overijse  
Belgium

MSDS Requests: (800) 852-5530  
Technical Information: (832) 813-4862  
Responsible Party: Product Safety Group  
Email:msds@cpchem.com

**Emergency telephone:****Health:**

866.442.9628 (North America)  
1.832.813.4984 (International)

**Transport:**

North America: CHEMTREC 800.424.9300 or 703.527.3887  
Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090  
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

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

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**


Acute toxicity, Category 4 H332: Harmful if inhaled.  
Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters airways.

**Label elements****Labeling (REGULATION (EC) No 1272/2008)**

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	H304      May be fatal if swallowed and enters airways. H332      Harmful if inhaled.
Precautionary Statements	:	<b>Prevention:</b> P261      Avoid breathing dust/fume/gas/mist/vapors/spray. P271      Use only outdoors or in a well-ventilated area. <b>Response:</b> P301 + P310      IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P304 + P340      IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312      Call a POISON CENTER or doctor/ physician if you feel unwell. P331      Do NOT induce vomiting. <b>Storage:</b> P405      Store locked up. <b>Disposal:</b> P501      Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label:

- 62132-67-6      1-Dodecene, Dimer Unhydrogenated

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : PAO, Polyalphaolefin

Molecular formula : (C<sub>12</sub>H<sub>24</sub>)<sub>2</sub>**Mixtures****Hazardous ingredients**

Chemical Name	CAS-No. EINECS-No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
1-Dodecene, Dimer Unhydrogenated	62132-67-6		Asp. Tox. 1; H304 Acute Tox. 4; H332	100

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

**4. FIRST AID MEASURES**

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may only appear several hours later. Do not leave the victim unattended.
- If inhaled : Move to fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

**5. FIRE-FIGHTING MEASURES**

- Flash point : 186 °C (367 °F)
- Autoignition temperature : 341 °C (646 °F)
- Unsuitable extinguishing media : High volume water jet.
- Special protective equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting 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 : None.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Use personal protective equipment. Ensure adequate ventilation.
- Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

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

**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.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Personal protective equipment**

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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

Skin and body protection : Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties****Appearance**

Form : Liquid

Physical state : Liquid

Color : Clear, colorless

**Safety data**

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

Flash point	: 186 °C (367 °F)
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Oxidizing properties	: no
Autoignition temperature	: 341 °C (646 °F)
Molecular formula	: (C <sub>12</sub> H <sub>24</sub> ) <sub>2</sub>
Molecular Weight	: 336,72 g/mol
pH	: Not applicable
Melting point/range	: < -50 °C (< -58 °F)
Boiling point/boiling range	: > 250 °C (> 482 °F)
Vapor pressure	: < 0,02 PSI at 37,8 °C (100,0 °F)
Density	: 807,7 G/L
Water solubility	: Soluble in hydrocarbon solvents; insoluble in water.
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: 7,5 cSt at 40 °C (104 °F)
Relative vapor density	: 7 (Air = 1.0)
Evaporation rate	: No data available

**10. STABILITY AND REACTIVITY****Possibility of hazardous reactions**

Conditions to avoid	: No data available.
Materials to avoid	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Other data	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION**

<b>Synfluid® Dimer C12</b>	
Acute oral toxicity	: LD50 Oral: > 5,0 g/kg Species: rat

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Acute inhalation toxicity

: LC50: 1,71 mg/l  
Exposure time: 4 HR  
Species: rat  
Sex: female

Information given is based on data obtained from similar substances.

LD50: > 5,06 mg/l  
Exposure time: 4 HR  
Species: rat  
Sex: male

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Acute dermal toxicity

: LD50 Dermal: > 2,0 g/kg  
Species: rabbit

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Skin irritation

: No skin irritation

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Eye irritation

: No eye irritation

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Sensitization

: Did not cause sensitization on laboratory animals.

Information given is based on data obtained from similar substances.

**Synfluid® Dimer C12**

Aspiration toxicity

: May be fatal if swallowed and enters airways.

Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

**Synfluid® Dimer C12**

Further information

: Solvents may degrease the skin.

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

Bioaccumulation : Bioaccumulation is unlikely.

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

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

**Further information on ecology**

Additional ecological information : This material is not expected to be harmful to aquatic organisms.  
Information given is based on data on the ingredients and the ecotoxicology of similar products.

**13. DISPOSAL CONSIDERATIONS**

The information in this MSDS 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.

**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 MSDS and the bill of lading.

**USDOT**

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

**IMO / IMDG**

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

**IATA**

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

**ADR**

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

**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

**RID**

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

**15. REGULATORY INFORMATION****National legislation****Notification status**

Europe REACH	: Not in compliance with the inventory
United States of America TSCA	: On the inventory, or in compliance with the inventory
Canada NDSL	: On the inventory, or in compliance with the inventory
Australia AICS	: Not in compliance with the inventory
New Zealand NZIoC	: Not in compliance with the inventory
Japan ENCS	: Not in compliance with the inventory
Korea KECI	: Not in compliance with the inventory
Philippines PICCS	: Not in compliance with the inventory
China IECSC	: Not in compliance with the inventory

**16. OTHER INFORMATION****Further information**

Legacy MSDS Number : 5836

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 MSDS pertains only to the product as shipped.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ACGIH	American Conference of Government Industrial Hygienists	LOAEL	Lowest Observed Adverse Effect Level
AICS	Australia, Inventory of Chemical Substances	NFPA	National Fire Protection Agency
DSL	Canada, Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
NDSL	Canada, Non-Domestic Substances List	NTP	National Toxicology Program
CNS	Central Nervous System	NZIoC	New Zealand Inventory of Chemicals
CAS	Chemical Abstract Service	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration	NOEC	No Observed Effect Concentration
EC50	Effective Concentration 50%	OSHA	Occupational Safety & Health



**Synfluid® Dimer C12**

Version 1.3

Revision Date 2010-11-23

			Administration
EINECS	European Inventory of Existing Chemical Substances	PEL	Permissible Exposure Limit
MAK	Germany Maximum Concentration Values	PICCS	Philippines Inventory of Commercial Chemical Substances
GHS	Globally Harmonized System	PRNT	Presumed Not Toxic
>=	Greater Than or Equal To	RCRA	Resource Conservation Recovery Act
IC50	Inhibition Concentration 50%	STEL	Short-term Exposure Limit
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act.
IECSC	Inventory of Existing Chemical Substances in China	TLV	Threshold Limit Value
ENCS	Japan, Inventory of Existing and New Chemical Substances	TWA	Time Weighted Average
KECI	Korea, Existing Chemical Inventory	TSCA	Toxic Substance Control Act
<=	Less Than or Equal To	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
LC50	Lethal Concentration 50%	WHMIS	Workplace Hazardous Materials Information System
LD50	Lethal Dose 50%		