

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

#### 1.1. Product identifier

Product form : Substance  
 Name : PROPYLENE  
 EC-No. : 204-062-1  
 CAS-No. : 115-07-1  
 REACH registration No : 01-2119447103-50  
 Product code : 101307300

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Synthesis agent  
 Refrigerant

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Dehon Service SAS  
 26 Avenue du Petit Parc  
 94683 VINCENNES Cedex - France  
 T 01 43 98 75 00 - F 01 43 98 21 51  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Climalife Kft Budepesta sucurcala Bucuresti Romania  
 Bulevardul Hristo Botev, Nr. 28,  
 Biroul NR 4, Modulul I  
 Bucuresti Sectorul 3 - Romania  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Dehon Kälte-Fachvertriebs GmbH  
 Robert-Bosch-Strasse 14  
 40668 MEERBUSCH - Germany  
 T 00 49 2150 7073 0 - F 00 49 2150 7073 17  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Dehon Service Belgium s.a/n.v.  
 Avenue Carton de Wiart, 79  
 1090 Bruxelles - Belgium  
 T 00 32 2 421 01 70 - F 00 32 2 426 96 62  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Friogas sa  
 Poligono Industrial SEPES  
 Parcela 10  
 46500 SAGUNTO (Valencia) - Spain  
 T 00 34 9 6 266 36 32 - F 00 34 9 6 266 50 25  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

IDS Refrigeration Limited  
 22 Apex Court, Woodlands, Bradley Stoke  
 BS32 4JT Bristol - United Kingdom  
 T 00 44 1179 802520 - F 00 44 1179 802521  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Climalife Hongrie Kft  
 Villányi út 47  
 1118 Budaörs - Hungary  
 T (36) 23 431 660 - F (36) 23 431 661  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Climalife Supplied by Inventec Performance Chemicals Italia SRL  
 Via del Lavoro, 10/G  
 20874 Busnago MB - Italia  
 T +39 39-5973480 - F +39 39-5973490  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Dehon nordic service  
 Östra Hamngatan 50B 3tr  
 41109 GÖTEBORG - Sweden  
 T 00 46 44 21 58 80 - F 00 46 44 21 58 80  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Dehon Service Nerderland B.V.  
 Van Konijnenburgweg 84  
 NL-4612 PL Bergen Op Zoom - Netherlands  
 T 00 31 164 212 830 - F 00 31 164 212 831  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Galco s.a/n.v.  
 Avenue Carton de Wiart, 79  
 1090 BRUSSELS - Belgium  
 T 00 32 2 421 01 84 - F 00 32 2 421 01 84 / 00 32 2 425 38 12  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

##### Other

Prochimac SA  
 Rue du Château 10  
 CH-2000 NEUCHÂTEL - Switzerland  
 T 00 41 32 727 36 00 - F 00 41 32 727 36 19  
[ContactFDS@climalife.dehon.com](mailto:ContactFDS@climalife.dehon.com)

#### 1.4. Emergency telephone number

Emergency number : +33 (0) 1 72 11 00 03

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## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Gas 1 H220

Press. Gas (Liq.) H280

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H220 - Extremely flammable gas.  
H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 - In case of leakage, eliminate all ignition sources.  
P410+P403 - Protect from sunlight. Store in a well-ventilated place.

### 2.3. Other hazards

Other hazards not contributing to the classification : May cause suffocation by reducing oxygen available for breathing. Contact with the liquid the may cause cold burns/frostbite.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : PROPYLENE

CAS-No. : 115-07-1

EC-No. : 204-062-1

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
propylene	(CAS-No.) 115-07-1 (EC-No.) 204-062-1 (EC Index-No.) 601-011-00-9 (REACH-no) 01-2119447103-50	100	Flam. Gas 1, H220 Press. Gas (Liq.), H280

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : In the event of contact with the liquid: treat resulting frostbite as a burn. Wash skin thoroughly with mild soap and water. Take off immediately all contaminated clothing. If skin burns appear, call a doctor immediately.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum).

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

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### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Dizziness, headaches, nausea.  
Symptoms/effects after skin contact : Burns.  
Symptoms/effects after eye contact : Tingling sensation. Lacrimation. Rednesses.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray.  
Unsuitable extinguishing media : Strong water jet.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable gas. Heating will cause a rise in pressure with a risk of bursting. The vapours are denser than air and may travel along the ground. Distance ignition possible.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Close the valve if possible. Cool down the containers exposed to heat with a water spray.  
Protection during firefighting : Impermeable boots and protective equipment. Self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop the leak. Evacuate the danger area. Avoid contact with skin and eyes. Do not breathe smoke. Only qualified personnel equipped with suitable protective equipment may intervene. Remove all sources of ignition.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. In case of important spillage : Local evacuation is necessary (for people in close proximity to the spillage area).

### 6.2. Environmental precautions

Control the vapours with a fine water spray.

### 6.3. Methods and material for containment and cleaning up

For containment : Ventilate spillage area.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Use non-sparking tools. Earth the equipment used to transfer the product. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid contact with skin and eyes.  
Hygiene measures : Always wash hands after handling the product. Do not drink, eat or smoke in the workplace.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep away from ignition sources. Store in original container.  
Incompatible products : Strong bases. Oxidizing materials. Oxidizing materials. Combustible materials.  
Packaging materials : Carbon steel.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### propylene (115-07-1)

#### Belgium - Occupational Exposure Limits

Local name	Propylène # Propeen
Limit value (mg/m <sup>3</sup> )	875 mg/m <sup>3</sup>

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Limit value (ppm)	500 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 11/03/2002
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Propen (Propylen)
Grænseværdie (langvarig) (mg/m <sup>3</sup> )	172 mg/m <sup>3</sup>
Grænseværdie (langvarig) (ppm)	100 ppm
Regulatory reference	BEK nr 986 af 11/10/2012
<b>Finland - Occupational Exposure Limits</b>	
Local name	Propyleeni
HTP-arvo (8h) (ppm)	500 ppm
Huomautus (FI)	liite 4 (HAPPEA SYRJÄYTTÄMÄLLÄ TUKEHDUTTAVAT KAASUT)
Regulatory reference	HTP-ARVOT 2016 (Sosiaali- ja terveysministeriö)
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Propileno
OEL TWA (ppm)	500 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Spain - Occupational Exposure Limits</b>	
Local name	Propileno
VLA-ED (ppm)	500 ppm
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2017. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Propen
nivågränsvärde (NVG) (mg/m <sup>3</sup> )	900 mg/m <sup>3</sup>
nivågränsvärde (NVG) (ppm)	500 ppm
Regulatory reference	Hygieniska gränsvärden (AFS 2015:7)
<b>Switzerland - Occupational Exposure Limits</b>	
Local name	Propen
MAK (mg/m <sup>3</sup> )	17500 mg/m <sup>3</sup>
MAK (ppm)	10000 ppm
Remark	Asphyxie, OAW
Regulatory reference	SUVA - Grenzwerte am Arbeitsplatz 2016

## 8.2. Exposure controls

<b>Hand protection:</b>
cold-insulating gloves
<b>Eye protection:</b>
Safety glasses with side shields
<b>Skin and body protection:</b>
Protective non-flammable and resistant to chemical penetration clothing
<b>Respiratory protection:</b>
If the occupational exposure limit is exceeded: Gas mask with filter type AX. In a confined area : Self-contained breathing apparatus

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquefied gas.
Colour	: Colourless.

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Odour	: olefin.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -185 °C
Freezing point	: No data available
Boiling point	: -48 °C
Flash point	: -108 °C
Critical temperature	: 91.8 °C
Auto-ignition temperature	: 455 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Extremely flammable gas.
Vapour pressure	: 120 kPa (20 °C)
Critical pressure	: 4560 kPa
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0.515 g/cm <sup>3</sup> (20 °C)
Solubility	: Poorly soluble in water. Soluble in : alcohols, Ethers.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive material according to EC criteria.
Oxidising properties	: Non oxidizing material according to EC criteria.
Lower explosive limit (LEL)	: 2 vol %
Upper explosive limit (UEL)	: 11.1 vol %

### 9.2. Other information

Gas group : Press. Gas (Liq.)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts violently with (strong) oxidizers.

### 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

### 10.3. Possibility of hazardous reactions

Flammable or explosive vapour/air mixtures may be formed.

### 10.4. Conditions to avoid

May explode or ignite : on contact with incompatible materials.

### 10.5. Incompatible materials

Strong bases. Strong acids. Strong oxidizing agents. Halogens (F, Cl, Br, I).

### 10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases : Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Additional information	: Asphyxiating
Skin corrosion/irritation	: Not classified
Additional information	: Contact with the liquid the may cause cold burns/frostbite
Serious eye damage/irritation	: Not classified
Additional information	: Contact with the liquefied gas may cause severe ocular lesions
Respiratory or skin sensitisation	: No sensitizing effect known
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

#### propylene (115-07-1)

LC50 fish 1 51.7 mg/l

EC50 Daphnia 1 28.2 mg/l

EC50 96h algae (1) 12.1 mg/l

#### 12.2. Persistence and degradability

#### propylene (115-07-1)

Persistence and degradability Biodegradable.

#### 12.3. Bioaccumulative potential

#### propylene (115-07-1)

Log Pow 1.77 (20°C)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

#### Component

propylene (115-07-1) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other adverse effects

Other adverse effects : ODP (R-11=1)=0.

### SECTION 13: Disposal considerations





#### 13.1. Waste treatment methods

Waste treatment methods : Refer to manufacturer or supplier for information on recovery or recycling.

Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

### SECTION 14: Transport information

In accordance with ADR / IMDG / RID / IATA

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
UN 1077	UN 1077	UN 1077	UN 1077
<b>14.2. UN proper shipping name</b>			
PROPYLENE	PROPYLENE	Propylene	PROPYLENE
<b>Transport document description</b>			
UN 1077 PROPYLENE, 2.1, (B/D)	UN 1077 PROPYLENE, 2.1	UN 1077 Propylene, 2.1	UN 1077 PROPYLENE, 2.1
<b>14.3. Transport hazard class(es)</b>			
2.1	2.1	2.1	2.1
			
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable

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### 14.5. Environmental hazards

Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
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No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : 2F  
Special provisions (ADR) : 662  
Limited quantities (ADR) : 0  
Tank code (ADR) : PxBN(M)  
Transport category (ADR) : 2  
Hazard identification number (Kemler No.) : 23  
Orange plates :



Tunnel restriction code (ADR) : B/D  
EAC code : 2YE

#### Transport by sea

Limited quantities (IMDG) : 0  
EmS-No. (Fire) : F-D  
EmS-No. (Spillage) : S-U

#### Air transport

PCA Limited quantities (IATA) : Forbidden  
PCA limited quantity max net quantity (IATA) : Forbidden  
PCA packing instructions (IATA) : Forbidden  
PCA max net quantity (IATA) : Forbidden  
CAO packing instructions (IATA) : 200  
CAO max net quantity (IATA) : 150kg  
Special provisions (IATA) : A1

#### Rail transport

Classification code (RID) : 2F  
Special provisions (RID) : 662  
Limited quantities (RID) : 0  
Tank codes for RID tanks (RID) : PxBN(M)  
Transport category (RID) : 2  
Colis express (express parcels) (RID) : CE3  
Hazard identification number (RID) : 23

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PROPYLENE is not on the REACH Candidate List

PROPYLENE is not on the REACH Annex XIV List

PROPYLENE is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

PROPYLENE is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to AwSV; ID No. 816)

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12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

### Denmark

Class for fire hazard : Class I-1  
Store unit : 1 liter  
Classification remarks : F+ <Flam. Gas 1; Press. Gas (Liq.); Emergency management guidelines for the storage of flammable liquids must be followed  
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Indication of changes:

All chapters have been modified since the previous version.

### Full text of H- and EUH-statements:

Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*