

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

1.1. Product identifier

Product form	: Substance
Name	: R-1270 (PROPYLENE)
EC Index-No.	: 601-011-00-9
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 intermediate Refrigerant Aerosol jet
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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

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

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

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

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

Other

Climalife Hongrie Kft
Villányi út 47
1118 Budaörs - Hungary
T (36) 23 431 660 - F (36) 23 431 661
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

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

Other

Dehon Service Nderland 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

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

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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

Other

Prochimac SA
ZI Petits Champs 15
CH-1400 Yverdon-les-Bains - Switzerland
T 00 41 32 727 36 00 - F 00 41 32 727 36 19
ContactFDS@climalife.dehon.com

1.4. Emergency telephone number

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

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 1A 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. 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 which do not result in 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 : R-1270 (PROPYLENE)
CAS-No. : 115-07-1
EC-No. : 204-062-1
EC Index-No. : 601-011-00-9

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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	≥ 99	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
n-Butane (Impurity)	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0 REACH-no: 01-2119474691-32	≤ 1	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
isobutane (Impurity)	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395-27	≤ 1	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
Propane (Impurity)	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21	≤ 1	Flam. Gas 1A, 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.

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

Symptoms/effects after inhalation	: Dizziness, headaches, nausea. Suffocation.
Symptoms/effects after skin contact	: Irritation. 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.

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5.2. Special hazards arising from the substance or mixture

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|--|--|
| 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

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|------------------|--|
| 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). |
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6.2. Environmental precautions

Control the vapours with a fine water spray.

6.3. Methods and material for containment and cleaning up

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|-----------------|----------------------------|
| For containment | : Ventilate spillage area. |
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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

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| 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

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|-----------------------|---|
| Storage conditions | : Store in a well-ventilated place. Keep away from ignition sources. Store in original container. |
| Incompatible products | : Strong acids. Strong bases. Oxidizing materials. Oxidizing materials. |
| Storage temperature | : < 50 °C |
| Packaging materials | : Carbon steel. |

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

n-Butane (106-97-8)	
United Kingdom - Occupational Exposure Limits	
Local name	Butane
WEL TWA (OEL TWA) [1]	1450 mg/m³
WEL TWA (OEL TWA) [2]	600 ppm
WEL STEL (OEL STEL)	1810 mg/m³
WEL STEL (OEL STEL) [ppm]	750 ppm
Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage. See paragraphs 49–51), (only applies if Butane contains more than 0.1% of buta-1,3-diene)
Propane (74-98-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	1800
IOEL TWA [ppm]	1000 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:

Protective non-flammable and resistant to chemical penetration clothing

Hand protection:

cold-insulating gloves

8.2.2.3. Respiratory protection

Respiratory protection:

If the occupational exposure limit is exceeded: Gas mask with filter type AX. In a confined area : Self-contained breathing apparatus

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquefied gas.
Colour	: Colourless.
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/cm³ (20 °C)
Solubility	: Poorly soluble in water. Soluble in: alcohols, Ethers.
Partition coefficient n-octanol/water (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.)
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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, CO2).

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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

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

12.2. Persistence and degradability

n-Butane (106-97-8)

Persistence and degradability	Readily biodegradable.
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Propane (74-98-6)

Persistence and degradability	< 60 % biodegradation after 28 days.
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12.3. Bioaccumulative potential

No additional information available

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
n-Butane (106-97-8)	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
Propane (74-98-6)	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.
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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 / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number			
UN 1077	UN 1077	UN 1077	UN 1077
14.2. UN proper shipping name			
PROPYLENE	PROPYLENE	Propylene	PROPYLENE
Transport document description			
UN 1077 PROPYLENE, 2.1, (B/D)	UN 1077 PROPYLENE, 2.1	UN 1077 Propylene, 2.1	UN 1077 PROPYLENE, 2.1
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
			
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
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
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	: <div><div>23</div><div>1077</div></div>

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

Transport by sea

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

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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

R-1270 (PROPYLENE) is not on the REACH Candidate List

R-1270 (PROPYLENE) is not on the REACH Annex XIV List

R-1270 (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.

R-1270 (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

No additional information available

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

Safety Data Sheet (SDS), EU

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.