

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

1.1. Product identifier

Product form : Mixture
Name : R-404A
Product code : 100044900

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

Relevant identified uses

Use of the substance/mixture : Refrigerant

1.3. Details of the supplier of the safety data sheet

Supplier

Dehon Service SAS
26 Avenue du Petit Parc
FR-94683 VINCENNES Cedex
France
T 00 33 1 43 98 75 00

ContactFDS@climalife.dehon.com

Other

Climalife Kft Budepesta sucursal Bucuresti Romania
Strada Teodosie Rudeanu, Nr. 49A
Biroul NR 4, Modulul I
RO-011247 Bucuresti Sector 1
Romania
T 00 44 1179 802520

ContactFDS@climalife.dehon.com

Other

Dehon Kälte-Fachvertriebs GmbH
Robert-Bosch-Strasse 14
40668 MEERBUSCH
Germany
T 00 49 2150 7073 0

ContactFDS@climalife.dehon.com

Other

Dehon Service Belgium s.a/n.v.
Avenue Carton de Wiart, 79
BE-1090 Bruxelles
Belgium
T 00 32 2 421 01 70

ContactFDS@climalife.dehon.com

Other

Friogas sa
Poligono Industrial SEPES
Parcela 10
46500 SAGUNTO (Valencia)
Spain
T 00 34 9 6 266 36 32

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Other

Prochimac SA
ZI. Rue des 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

Other

Other

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Other

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Viale Delle Industrie 57
IT-20881 Bernareggio (MB)
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T 00 39 39 5973480, F

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Other

Dehon nordic service
Östra Hamngatan 50B 3tr
SE-41109 GÖTEBORG
Sweden
T 00 46 44 21 58 80

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Other

Dehon Service Nerderland B.V.
Van Konijnenburgweg 84
NL-4612 PL Bergen Op Zoom
Netherlands
T 00 31 164 212 830

ContactFDS@climalife.dehon.com

Other

IDS Refrigeration Limited
Green Court, Kings Weston Lane
Avonmouth
UK-BS11 8AZ Bristol
United Kingdom
T 00 44 1179 802520

ContactFDS@climalife.dehon.com

Other

Galco s.a/n.v.
Avenue Carton de Wiart, 79
BE-1090 BRUSSELS
Belgium
T 00 32 2 421 01 84

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Other

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Climalife Asia Corporation

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Other

Teknalys Middle East FZCO

B34BS330203, Jebel Ali Free Zone

Dubai - AE

United Arab Emirates

T 00 65 97 12 43 38

ContactFDS@climalife.dehon.com

Galco Singapore Branch

135 Cecil Street #10-01

SG-69536 Singapore

T 00 971 56 105 15 47

ContactFDS@climalife.dehon.com

1.4. Emergency telephone number

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

Country/Area	Organisation	Emergency number
Ireland	National Poisons Information Centre. Beaumont Hospital. PO Box 1297. Beaumont Road 9 Dublin.	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
United Kingdom	National Poisons Information Service (Birmingham Centre). City Hospital. Dudley Road B18 7QH.	0344 892 0111 Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Press. Gas (Liq.) H280

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

Adverse physicochemical, human health and environmental effects

Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Contact with the liquid may cause frostbite and serious damage to eyes.

2.2. Label elements

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

Hazard pictograms (CLP)



GHS04

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (CLP)

: P403 - Store in a well-ventilated place.

Extra phrases

: Greenhouse fluorinated gas falling within Kyoto Protocol (GWP=3922).

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	1,1,1-Trifluoroethane (420-46-2), Pentafluoroethane (354-33-6), 1,1,1,2-Tetrafluoroethane (811-97-2)
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Component

Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	1,1,1-Trifluoroethane (420-46-2), Pentafluoroethane (354-33-6), 1,1,1,2-Tetrafluoroethane (811-97-2)
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The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,1,1-Trifluoroethane	CAS-No.: 420-46-2 EC-No.: 206-996-5 REACH-no: 01-2119492869-13	52	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
Pentafluoroethane	CAS-No.: 354-33-6 EC-No.: 206-557-8 REACH-no: 01-2119485636-25	44	Press. Gas (Liq.), H280
1,1,1,2-Tetrafluoroethane	CAS-No.: 811-97-2 EC-No.: 212-377-0 REACH-no: 01-2119459374-33	4	Press. Gas (Liq.), H280

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: In the event of contact with the liquid: treat resulting frostbite as a burn. Immediately remove contaminated clothing or footwear. Immediately rinse with plenty of water. 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). Consult an eye specialist immediately.
First-aid measures after ingestion	: Not specifically applicable (gas).

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

Symptoms/effects	: CNS depression. Narcosis. Cardiac disorders. Lack of oxygen: risk of death.
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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	: All extinguishing agents can be used.
Unsuitable extinguishing media	: None to our knowledge. If there is a fire close by, use suitable extinguishing agents.

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5.2. Special hazards arising from the substance or mixture

Explosion hazard : pressure rise and possible bursting of container. On heating : Toxic and corrosive vapours are released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. Remove all sources of ignition. Do not smoke. Evacuate the danger area. Do not breathe smoke. Stop the leak.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Other information : Mechanically ventilate the spillage area.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing mist, vapours. Do not get in eyes, on skin, or on clothing. Ventilation. Vapours are heavier than air and may spread along floors. Under certain temperature and pressure conditions may form a flammable mixture in the presence of air.
Hygiene measures : Do not drink, eat or smoke in the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store : in a cool, well-ventilated area, away from any source of heat, away from any source of ignition.
Incompatible materials for storage : Strong oxidizing agents. Alkaline hydroxide. Alkaline earth metals. Finely divided metals (Al, Mg, Zn).
Packaging materials : Recommended materials Stainless steel, Carbon steel. Do not use : Alloys containing more than 2% magnesium, Plastic materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Pentafluoroethane (354-33-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	4900 mg/m ³ (recommended)
	1000 ppm (recommended)

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1,1,1,2-Tetrafluoroethane (811-97-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	4240 mg/m³
	1000 ppm
United Kingdom - Occupational Exposure Limits	
Local name	1,1,1,2-Tetrafluoroethane (HFC 134a)
WEL TWA (OEL TWA)	4240 mg/m³
	1000 ppm
WEL STEL (OEL STEL)*	12720 mg/m³
	3000 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

*STEL value is calculated based on the TWA limit

DNEL and PNEC

1,1,1-Trifluoroethane (420-46-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	38800 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	10700 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	350 µg/l
Pentafluoroethane (354-33-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	16444 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	1753 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.6 mg/kg dwt
1,1,1,2-Tetrafluoroethane (811-97-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	13936 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	2476 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l

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1,1,1,2-Tetrafluoroethane (811-97-2)

PNEC (Sediment)

PNEC sediment (freshwater)	0.75 mg/kg dwt
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PNEC (STP)

PNEC sewage treatment plant	73 mg/l
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8.2. Exposure controls

Personal protection equipment

Eye and face protection

Eye protection:

Safety glasses with side shields

Skin protection

Skin and body protection:

Majority cotton protective clothing

Hand protection:

Leather protective gloves. Nitrile-rubber protective gloves. VITON gloves

Respiratory protection

Respiratory protection:

In the event of insufficient ventilation: 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
Colour	: Colourless.
Appearance	: Press. Gas (Liq.).
Molecular mass	: 97.6 g/mol
Odour	: slightly ethereal.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: -46.23 °C
Flammability	: Non flammable
Explosive properties	: Not explosive material according to EC criteria.
Oxidising properties	: Non oxidizing material according to EC criteria.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: None
Auto-ignition temperature	: Not available
Decomposition temperature	: 250 °C
pH	: Not applicable
Viscosity, kinematic	: Not applicable
Solubility	: Insoluble in water. Water: 0.055 %
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 12.55 bar (25°C)
Vapour pressure at 50°C	: 23.11 bar (50°C)
Critical pressure	: 37.29 bar
Density	: 1044 kg/m³ (25°C)
Relative density	: Not applicable
Relative vapour density at 20°C	: 3.45
Particle characteristics	: Not applicable

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9.2. Other information

Information with regard to physical hazard classes

Critical temperature : 72 °C

Other safety characteristics

VOC content : 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Decomposes on exposure to temperature rise.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No information available. No polymerization.

10.4. Conditions to avoid

Avoid high temperatures. Avoid naked flame. Heating will cause a rise in pressure with a risk of bursting.

10.5. Incompatible materials

Alkalis and caustic products. alkali metals. Alkaline earth metals. Finely divided metals (Al, Mg, Zn). Strong oxidizing agents.

10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases : Hydrogen fluoride, Carbon oxides (CO, CO₂), Fluorinated hydrocarbons, Carbonyl halogenides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

1,1,1-Trifluoroethane (420-46-2)

LC50 Inhalation - Rat [ppm]	591000 ppm/4h
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Pentafluoroethane (354-33-6)

LC50 Inhalation - Rat [ppm]	800000 ppm/4h
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1,1,1,2-Tetrafluoroethane (811-97-2)

LC50 Inhalation - Rat [ppm]	> 500000 ppm/4h
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Skin corrosion/irritation : Not classified
pH: Not applicable

Additional information : Contact with the liquid causes frostbite

1,1,1-Trifluoroethane (420-46-2)

pH	Not applicable
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Pentafluoroethane (354-33-6)

pH	Not applicable
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1,1,1,2-Tetrafluoroethane (811-97-2)

pH	Not applicable
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Serious eye damage/irritation : Not classified
pH: Not applicable
Additional information : Contact with the liquefied gas may cause severe ocular lesions

1,1,1-Trifluoroethane (420-46-2)

pH Not applicable

Pentafluoroethane (354-33-6)

pH Not applicable

1,1,1,2-Tetrafluoroethane (811-97-2)

pH Not applicable

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

1,1,1,2-Tetrafluoroethane (811-97-2)

NOAEL (chronic, oral, animal/male, 2 years) 300 mg/kg bodyweight rat

Reproductive toxicity : Not classified

Pentafluoroethane (354-33-6)

NOAEL (animal/male, F0/P) 245 mg/kg

NOAEL (animal/female, F0/P) 245 mg/kg

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Pentafluoroethane (354-33-6)

NOAEC (inhalation, rat, dust/mist/fume, 90 days) 50000 ppm

1,1,1,2-Tetrafluoroethane (811-97-2)

NOAEC (inhalation, rat, gas, 90 days) 50000 ppm Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Aspiration hazard : Not applicable

1,1,1,2-Tetrafluoroethane (811-97-2)

Viscosity, kinematic 0.162 mm²/s

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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

1,1,1-Trifluoroethane (420-46-2)

LC50 - Fish [1] > 40 mg/l Oncorhynchus mykiss (Rainbow trout)

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1,1,1-Trifluoroethane (420-46-2)	
LC50 - Fish [2]	109 mg/l (freshwater)
EC50 - Crustacea [1]	115 – 300 mg/l 48 Hours (Daphnia magna)
EC50 72h - Algae [1]	≈ 71 mg/l Test organisms (species):
EC50 96h - Algae [1]	71 mg/l
NOEC chronic algae	> 44 mg/l selenastrum capricornutum

Pentafluoroethane (354-33-6)	
LC50 - Fish [1]	> 81.8 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	450 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 97.9 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 114 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 118 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
NOEC chronic fish	32 mg/l Test organisms (species): Duration: '30 d'

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 - Fish [1]	450 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	980 mg/l 48 Hours (Daphnia magna)
EC50 72h - Algae [1]	> 118 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 114 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

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Persistence and degradability	Not established.
1,1,1-Trifluoroethane (420-46-2)	
Persistence and degradability	3 % biodegradation after 28 days.
Pentafluoroethane (354-33-6)	
Persistence and degradability	5 % biodegradation after 28 days, Not readily biodegradable.
1,1,1,2-Tetrafluoroethane (811-97-2)	
Persistence and degradability	Photodegradation in the air :, Half-life in air : 9,7 y, 3 % biodegradation after 28 days.

12.3. Bioaccumulative potential

1,1,1-Trifluoroethane (420-46-2)	
Partition coefficient n-octanol/water (Log Pow)	1.73
Pentafluoroethane (354-33-6)	
Partition coefficient n-octanol/water (Log Kow)	1.48 (25°C)

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1,1,1,2-Tetrafluoroethane (811-97-2)

Partition coefficient n-octanol/water (Log Pow)	1.06
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12.4. Mobility in soil

Pentafluoroethane (354-33-6)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.3 – 1.7
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1,1,1,2-Tetrafluoroethane (811-97-2)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5
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12.5. Results of PBT and vPvB assessment

Component

Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	1,1,1-Trifluoroethane (420-46-2), Pentafluoroethane (354-33-6), 1,1,1,2-Tetrafluoroethane (811-97-2)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	1,1,1-Trifluoroethane (420-46-2), Pentafluoroethane (354-33-6), 1,1,1,2-Tetrafluoroethane (811-97-2)

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

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

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Other information	GWP (CO ₂ =1/100 years) = 3922
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1,1,1-Trifluoroethane (420-46-2)

Other information	GWP (CO ₂ =1/100 years) = 4470
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Pentafluoroethane (354-33-6)

Other information	GWP (CO ₂ =1/100 years) = 3500
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1,1,1,2-Tetrafluoroethane (811-97-2)

Other information	GWP (CO ₂ =1/100 years) = 1430
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Methods of disposal of packaging. Reuse or recycle following decontamination. Destroy at an authorised site.

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

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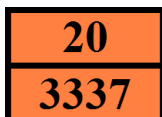
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3337	UN 3337	UN 3337
14.2. UN proper shipping name		
REFRIGERANT GAS R 404A	REFRIGERANT GAS R 404A	Refrigerant gas R 404A
Transport document description		
UN 3337 REFRIGERANT GAS R 404A, 2.2, (C/E)	UN 3337 REFRIGERANT GAS R 404A, 2.2	UN 3337 Refrigerant gas R 404A, 2.2
14.3. Transport hazard class(es)		
2.2	2.2	2.2
		
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-C EmS-No. (Spillage): S-V	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: 2A
Special provisions (ADR)	: 662
Limited quantities (ADR)	: 120ml
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P200
Mixed packing provisions (ADR)	: MP9
Portable tank and bulk container instructions (ADR)	: (M), T50
Tank code (ADR)	: PxBN(M)
Tank special provisions (ADR)	: TA4, TT9
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV10, CV36
Hazard identification number (Kemler No.)	: 20
Orange plates	:



Tunnel restriction code (ADR)	: C/E
EAC code	: 2TE

Transport by sea

Limited quantities (IMDG)	: 120 ml
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P200
Tank instructions (IMDG)	: T50
Stowage category (IMDG)	: A

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Properties and observations (IMDG) : Liquefied, non-flammable, colourless gas with a faint ether-like odour. Heavier than air (1.06) Very high exposures may cause anaesthetic effects and asphyxiation.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : 200
PCA max net quantity (IATA) : 75kg
CAO packing instructions (IATA) : 200
CAO max net quantity (IATA) : 150kg
ERG code (IATA) : 2L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

Other information, restriction and prohibition regulations : REGULATION (EU) 2024/573 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 February 2024 on fluorinated greenhouse gases, amending Directive (EU) 2019/1937 and repealing Regulation (EU) No 517/2014.

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Ensure all national/local regulations are observed.

15.2. Chemical safety assessment

No additional information available

R-404A

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 16: Other information

Indication of changes		
Section	Changed item	Comments
	Reference number	Modified
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added
15.1	Other information, restriction and prohibition regulations	Modified

Other information : For more information regarding the use of this product, please refer to our technical information or contact the sales department in your region.

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.