Safety Data Sheet
Refrigerant R513A

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 SDS
Reference Number: 100151300 Revision date: 12/20/2024 Supersedes version of: 10/10/2019 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Name : R-513A
Product code : 100151300

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

Star International Star House, Turbine Business Park, Turbine Road, Birkenhead,
CH41 9BA
+44 (0) 1244 504 500
enquiries@star-international.co.uk

1.4. Emergency telephone number

+44 (0) 1244 504 500

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=629).

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 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	1,1,1,2-Tetrafluoroethane (811-97-2), 2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)

Component	
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	1,1,1,2-Tetrafluoroethane (811-97-2), 2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)

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]
2,3,3,3-Tetrafluoroprop-1-ene	CAS-No.: 754-12-1 EC-No.: 468-710-7 REACH-no: 01-0000019665-61	56	Flam. Gas 1B, H221 Press. Gas (Liq.), H280
1,1,1,2-Tetrafluoroethane	CAS-No.: 811-97-2 EC-No.: 212-377-0 REACH-no: 01-2119459374-33	44	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.

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.

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.

Hazardous decomposition products in case of fire : Thermal decomposition generates : Carbon oxides (CO, CO2), Hydrogen halogenides, Carbonyl halogenides, fluorinated compounds.

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.

No additional information available

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. Do not use joint paste that may contain peroxides.

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 : 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

R-513A	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	4240 mg/m³
	1000 ppm

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
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	500 ppm (recommended)

DNEL and PNEC

R-513A	
PNEC (Water)	
PNEC aqua (intermittent, freshwater)	1 mg/l

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
PNEC (Sediment)	
PNEC sediment (freshwater)	0.75 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	73 mg/l

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	186400 mg/m³
Long-term - systemic effects, inhalation	950 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	186400 mg/m³
Long-term - systemic effects, inhalation	113.1 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0.1 mg/l
PNEC aqua (marine water)	0.01 mg/l

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	1.51 mg/kg dwt
PNEC sediment (marine water)	0.151 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.49 mg/kg dwt

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	:	108.43 g/mol
Odour	:	slightly ethereal.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not applicable
Boiling point	:	-29.58 °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	:	Not available
pH	:	Not applicable
Viscosity, kinematic	:	Not applicable
Solubility	:	Insoluble in water. Water: 8.76 %
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	7.13 bar (25°C)
Vapour pressure at 50°C	:	13.77 bar (50°C)
Critical pressure	:	38.55 bar
Density	:	1134 kg/m³ (25°C)
Relative density	:	Not applicable
Relative vapour density at 20°C	:	Not available

Partition coefficient n-octanol/water (Log Kow) : Not available
Vapour pressure : 7.13 bar (25°C)
Vapour pressure at 50°C : 13.77 bar (50°C)
Critical pressure : 38.55 bar
Density : 1134 kg/m³ (25°C)
Relative density : Not applicable
Relative vapour density at 20°C : Not available

Particle characteristics : Not applicable

9.2. Other information

Information with regard to physical hazard classes

Critical temperature : 97.7 °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

Under certain temperature and pressure conditions may form a flammable mixture in the presence of air. Avoid high temperatures. Avoid naked flame.

10.5. Incompatible materials

Do not use joint paste that may contain peroxides. 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

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 Inhalation - Rat [ppm]	> 500000 ppm/4h

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
LC50 Inhalation - Rat [ppm]	> 400000 ppm/4h

Skin corrosion/irritation : Not classified
pH: Not applicable

Additional information : Contact with the liquid causes frostbite

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

Serious eye damage/irritation : Not classified
pH: Not applicable

Additional information : Contact with the liquefied gas may cause severe ocular lesions

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

R-513A	
NOAEC (inhalation, rat, gas, 90 days)	50000 ppm Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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)

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
NOAEL (subacute, dermal, 28 days)	> mg/kg bodyweight/day >
NOAEL (subacute, dermal, animal/male, 28 days)	mg/kg bodyweight/day

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

R-513A	
EC50 72h - Algae [2]	> 114 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

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)

2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
LC50 - Fish [1]	> 197 mg/l Test organisms (species): Cyprinus carpio
LC50 - Fish [2]	33 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	65 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 2.5 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
LOEC (chronic)	> 15.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	15.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	2.7 mg/l Test organisms (species): Cyprinus carpio Duration: '28 d'

12.2. Persistence and degradability

R-513A	
Persistence and degradability	Not established.
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.
2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

1,1,1,2-Tetrafluoroethane (811-97-2)	
Partition coefficient n-octanol/water (Log Pow)	1.06
2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)	
Partition coefficient n-octanol/water (Log Pow)	2.15

12.4. Mobility in soil

1,1,1,2-Tetrafluoroethane (811-97-2)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	1,1,1,2-Tetrafluoroethane (811-97-2), 2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	1,1,1,2-Tetrafluoroethane (811-97-2), 2,3,3,3-Tetrafluoroprop-1-ene (754-12-1)

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.
Additional information : GWP (CO2=1/100 years) = 629

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

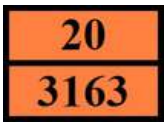
In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3163	UN 3163	UN 3163
14.2. UN proper shipping name		
LIQUEFIED GAS, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane)	LIQUEFIED GAS, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane)	Liquefied gas, n.o.s. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane)
Transport document description		
UN 3163 LIQUEFIED GAS, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane), 2.2, (C/E)	UN 3163 LIQUEFIED GAS, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane), 2.2	UN 3163 Liquefied gas, n.o.s. (2,3,3,3-Tetrafluoroprop-1-ene ; 1,1,1,2-Tetrafluoroethane), 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) : 274, 392, 662
Limited quantities (ADR) : 120ml
Tank code (ADR) : PxBN(M)
Transport category (ADR) : 3
Hazard identification number (Kemler No.) : 20

Orange plates : 

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

Transport by sea
Special provisions (IMDG) : 274, 392
Limited quantities (IMDG) : 120 ml

Air transport
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

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 (EC) No 517/2014 : Greenhouse fluorinated gas falling within Kyoto Protocol.

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
40.	2,3,3,3-Tetrafluoroprop-1-ene

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 (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 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 (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 (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

SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
	Revision date	Modified
	Supersedes	Modified
	Issue date	Added
	UN-No. (RID)	Modified
	Proper Shipping Name (RID)	Modified
	Special provisions (RID)	Modified
	Classification code (RID)	Added
	Proper Shipping Name (IMDG)	Modified
	Special provisions (IMDG)	Modified
	Proper Shipping Name (IATA)	Modified
	Adverse health effects caused by endocrine disrupting properties	Added
	Flash point (IMDG)	Removed
2.2	Precautionary statements (CLP)	Modified
2.2	Extra phrases	Modified
3	Composition/information on ingredients	Modified
8	IOEL TWA	Added
8	IOEL TWA	Added
8.1	PNEC aqua (intermittent, freshwater)	Added
9	VOC content	Added
9	Solubility in water	Added
9	Molecular mass	Added
9	Critical pressure	Modified
9.1	Critical temperature	Modified
11.1	NOAEC (inhalation, rat, gas, 90 days)	Added
12.1	EC50 72h - Algae [2]	Added
12.2	Persistence and degradability	Added
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added
14.1	UN-No. (ADN)	Modified

Indication of changes		
Section	**Changed item**	**Comments**
14.1	UN-No. (ADR)	**Modified**
14.1	UN-No. (IMDG)	**Modified**
14.1	UN-No. (IATA)	**Modified**
14.2	Proper Shipping Name (ADN)	**Modified**
14.2	Proper Shipping Name (ADR)	**Modified**
14.6	Special provisions (ADN)	**Modified**
14.6	Special provisions (ADR)	**Modified**
15.1	REACH Annex XVII	**Added**

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 1B	Flammable gases, Category 1B
H221 H280 Press.	Flammable gas.
Gas (Liq.)	Contains gas under pressure; may explode if heated.
	Gases under pressure : Liquefied gas

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.