

# SAFETY DATA SHEET Opteon™ YF (R-1234yf)

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended. According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) 2020/878 of 18 June 2020.

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

#### 1.1. Product identifier

Product name Opteon™ YF (R-1234yf)

**Chemical name** 2,3,3,3-Tetrafluoropropene

**CAS number** 754-12-1 **EC number** 468-710-7

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

Identified uses Heat transfer fluid. Refrigerant. Formulation of mixtures.

Uses advised against For professional and industrial installations and use only.

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

Supplier Cantaş Kimya Sanayi ve Ticaret A.Ş.

Çerkeşli Mahallesi, Gebze V (Kimya) İhtisas OSB, Fatma Börü Caddesi No:5/1 41455 Dilovası/ Kocaeli

Tel: 0212 910 1260 / (Monday - Friday, 8:30 am-5:30 pm)

E-posta: info@cantaskimya.com

Manufacturer Chemours Netherlands B.V.

Baanhoekweg 22 3313 LA Dordrecht Netherlands

Tel: +31-(0)-78-630-1011 Faks: +31-78-6163737 sds-support@chemours.com

#### 1.4. Emergency telephone number

Emergency telephone Cantaş: +90 212 910 12 60

#### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720) / (EC 1272/2008)

Physical hazards Flam. Gas 1A - H220 Press. Gas (Liq.) - H280

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

**EC number** 468-710-7

#### Hazard pictograms





Signal word Danger

Hazard statements H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.



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**Precautionary statements** P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P381 Eliminate all sources of ignition in case of leakage.

P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

#### 2.3. Other hazards

Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects Rapid evaporation of the product may cause frostbite. It can displace oxygen, causing rapid suffocation.

#### SECTION 3: Composition/information on ingredients

3.1. Substances

Product name Opteon™ YF (R-1234yf)

Chemical name 2,3,3,3-Tetrafluoropropene

**CAS number** 754-12-1

**EC number** 468-710-7

**Amount w/w** >99,50 %

3.2. Mixtures

**Description** Not applicable.

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get

medical attention if any discomfort continues.

Ingestion Remove any dentures. Do not induce vomiting unless under the direction of medical personnel. If vomiting

occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact Thaw frosted parts with lukewarm water. Do not rub affected area. Get medical attention immediately.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart.

Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous

for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information High vapour concentrations can cause headaches, dizziness, drowsiness, and nausea, and may lead to

unconsciousness. May cause cardiac arrhythmia.

Inhalation No specific symptoms known. May cause respiratory irritation.

**Ingestion** Due to the physical nature of this product, it is unlikely that ingestion will occur.

Skin contact Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin.



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Eye contact Frostbite.

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

Notes for the doctor Treat symptomatically.

Specific treatments Due to possible heart rhythm disorders; Catecholamine drugs such as epinephrine should be used with

special caution and only in cases of emergency life support.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

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

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours may

form explosive mixtures with air.

Hazardous combustion products Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen fluoride (HF). Fluorinated compounds.

5.3. Advice for firefighters

Protective actions during

firefighting

Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Special protective equipment for

firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

Firefighter's clothing will provide a basic level of protection for chemical incidents.

#### SECTION 6: Accidental release measures

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

Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary

ignition.

6.2. Environmental precautions

Environmental precautions Avoid release to the environment. Stop leak if safe to do so. Contain and collect extinguishing water.

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

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately

and dispose of waste safely. Flush contaminated area with plenty of water. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Ventilate

closed spaces before entering them. Use only non-sparking tools.



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#### 6.4. Reference to other sections

#### Reference to other sections

For safety handling, see section 7. For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

#### Usage precautions

Never attempt to lift cylinder by its cap. Do not drag, slide or roll cylinders. Use equipment defined for cylinder pressure. Use a device that prevents backflow in the piping system. Close the valve after each use and when emptying. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Read and follow manufacturer's recommendations. Take precautionary measures against static discharge. Avoid discharge into drains. Wear protective clothing as described in Section 8 of this safety data sheet. Good personal hygiene procedures should be implemented. Keep away from food, drink and animal feeding stuffs.

Valve protection caps and valve threaded outlet plugs must remain in place as long as the container is securely piped to use with the valve outlet port. Use a control valve or orifice in the discharge path to prevent backflow into the cylinder. Take care that the gas does not flow back into the cylinder. Apply a pressure reducing regulator (< 3000 psig) when connecting the cylinder to reduce pressure (< 3000 psig) piping or systems. Close the valve after each use and when emptying. DO NOT change or force solid connections. Make sure that no water leaks into the gas cylinder. Never try to lift the cylinders by the cover. Do not pull, slide or roll the rollers. Use for proper wheelbarrow roller movement.

## Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Do not eat, drink or smoke when using this product. Change work clothing daily before leaving workplace. Take off contaminated clothing. Wash at the end of each work shift and before eating, smoking and using the toilet.

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

#### Storage precautions

Keep horizontal design tube/drum/tanks horizontal, vertical design tube/drum/tank upright. Protect containers from damage. Protect from sunlight. Keep away from flammable and combustible materials. Only store in correctly labelled containers. Keep container tightly closed, in a cool, well ventilated place. Store at temperatures not exceeding 52°C. Keep only in the original container. Separate full containers from empty containers. Store away from incompatible materials (see Section 10).

#### Storage class

Do not store together with the following product types: Org. Perox. = Organic peroxide Oxidising agents. Flam. Liq. = Flammable liquid Flam. Sol. = Flammable solid Pyr. Liq. = Pyrophoric liquid Pyr. Sol. = Pyrophoric solid Hazardous substances that develop flammable gases in contact with water Expl. = Explosive

#### 7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.



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#### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

PNEC Fresh water; 0.1 mg/l
Intermittent release; 1 mg/l

Sediment (Freshwater); 1.77 mg/kg, dry weight

Soil; 1.54 mg/kg, dry weight marine water; 0.01 mg/l

Sediment (Marinewater); 0.178 mg/kg, dry weight

#### 8.2. Exposure controls

#### Protective equipment







#### Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. To protect hands against cold burns, gloves must comply with the EN 511 standard. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

#### Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Wear anti-static protective clothing if there is a risk of ignition from static electricity.

#### Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.



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Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk assessment

indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges suitable for intended use should be used. Gas filter, type AX. Full face mask respirators with replaceable filter cartridges suitable for intended use should be used. Half mask and quarter mask respirators with replaceable filter cartridges suitable for intended use should

be used.

**Environmental exposure controls** Keep container tightly sealed when not in use.

#### SECTION 9: Physical and chemical properties

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

Appearance Liquefied gas

Colour Colourless

Odour Mild ethereal odor.

Odour threshold No information available.

**pH** Not applicable.

Melting point -152,2°C

Initial boiling point and range -29°C

Flash point

Evaporation rate

Not applicable.

Not applicable.

Flammability (solid, gas)

Flammable.

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 6,2 % Yöntem: ASTM E681 Upper flammable/explosive limit: 12,3 % Yöntem: ASTM E681 All percentages displayed expressed as volume/volume.

Vapour pressure 5800 hPa @ 20°C

Vapour density 4 (Air = 1.0)

Relative density

No information available.

Density or relative density

0,0048 g/cm³ (20 °C)

Solubility(ies) 198,2 mg/L water @ 24°C

Partition coefficient log Pow: 2 (25 °C)

Auto-ignition temperature 405°C

**Decomposition Temperature**No information available.

Viscosity Not applicable.

Explosive properties Not explosive.

Oxidising properties Does not meet the criteria for classification as oxidising.

Particle characteristics No information available.



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9.2. Other information

Other information Minimum ignition energy: 5 - 10 J

Molecular weight 114 g/mol

Combustion rate 15 mm/s

#### SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity** There is no danger of reaction.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Follow the precautionary

recommendation and avoid inappropriate items and conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Vapors may form flammable mixtures with air. May react with strong oxidizing agents.

Flammable gas.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.

10.5. Incompatible materials

Materials to avoid Avoid contact with acids and alkalis.

Strong oxidising agents.

Oxygen.
Peroxides.
Peroksit bileşikleri
Powdered metal.

Contaminations (e.g. rust, dust, ash)

#### 10.6. Hazardous decomposition products

Hazardous decomposition

azardous decomposition

No known hazardous decomposition products.

products

#### SECTION 11: Toxicological information

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

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - inhalation



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Notes (inhalation LC₅o) LC50 >405800 ppm, Inhalation, (OECD Test Guideline 403)

NOAEC 120000 ppm,, Dog Test atmosphere: gaz Notes: Cardiac sensitivity

Upper threshold for heart sensitivity (Dog): > 559,509 mg/m<sup>3</sup>

Test atmosphere: gas Notes: Cardiac tenderness

Skin corrosion/irritation

**Skin corrosion/irritation**Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Summary** Based on available data the classification criteria are not met.

Genotoxicity - in vitro Bacterial reverse mutation test: Positive. (OECD Guideline 471)

Chromosome aberration: Negative. (OECD Guideline 473)

Genotoxicity - in vivo Mammalian Erythrocyte Micronucleus Test: Negative.

Type: Mouse

Method of Administration: inhalation (gas) Method: OECD Test Guideline 474 DNA damage and/or repair: Negative.

Type: Rat

Method of Administration: inhalation (gas) Method: OECD Test Guideline 489

(in vivo sitogene-tik tahlili) Mammalian Erythrocyte Micronucleus Test: Negative.

Type: Rat

Method of Administration: inhalation (gas) Method: OECD Test Guideline 474

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Negative. Weight of evidence.

IARC carcinogenicity

None of the ingredients are listed or exempt.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Reproductive toxicity - fertility Two-generation study - , Inhalation, Rat

Method: OECD Test Guideline 416

Teratogenicity: -:, Inhalation, Rat

Result: negative

Reproductive toxicity -

development Method: OECD Test Guideline 414

Result: negative

Specific target organ toxicity - single exposure



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**Summary** Based on available data the classification criteria are not met.

STOT - single exposure Gaz , Inhalation,

No appreciable health effects in animals have been observed at concentrations of 20000 ppm/4

hours or less.

Specific target organ toxicity - repeated exposure

**Summary** Based on available data the classification criteria are not met.

STOT - repeated exposure Gaz, Inhalation,

No appreciable health effects in animals have been observed at concentrations of 250 ppm/6 hours/

day or less.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

Repeated dose toxicity Species: Rat, male and female

NOAEL: 50000 ppm LOAEL: >50000 ppm

Application Method: inhalation (gas)

Exposure time: 13 weeks.

Method: OECD Test Guideline 413

11.2. Information on other hazards

Information on other hazards This product does not contain any known or suspected endocrine disruptors.

#### SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous

effects on the environment.

12.1. Toxicity

**Toxicity** Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hour: >197 mg/l, Cyprinus carpio (Common carp)

(OECD 203)

Acute toxicity - aquatic EC<sub>50</sub>, 4

EC<sub>50</sub>, 48 hour: >100 mg/l, Daphnia magna (Water flea)

invertebrates (OECD 202)

Acute toxicity - aquatic plants EC₅₀, : >100 mg/l, Selenastrum capricornutum

(OECD 201)

NOEC, : >75 mg/l, Selenastrum capricornutum

(OECD 201)



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#### 12.2. Persistence and degradability

Persistence and degradability Not readily biodegradable.

(OECD 301F)

12.3. Bioaccumulative potential

Bioaccumulative potential It is unlikely to bioaccumulate. log

Partition coefficient Pow: 2 (25 °C)

12.4. Mobility in soil

Mobility No data available.

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

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Endocrine disrupting

properties

12.7. Other adverse effects

Other adverse effects None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

General information External recovery, treatment, recycling and disposal of waste should comply with all applicable local and/

or national regulations.

The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

Waste Codes are not specific to the product, they are specific to use.

Waste codes should be determined by the user, preferably in consultation with the waste disposal

authorities.

**Disposal methods**Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor.

Empty, pressure-resistant containers should be returned to the company.

Do not pressurize, cut, weld, riveted, solder, drill, grind, or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury and/or death. Unless otherwise stated:

Dispose of as unused product.

## SECTION 14: Transport information

14.1. UN number or ID number

**UN No. (ADR/RID)** 3161

**UN No. (IMDG)** 3161

**UN No. (ICAO)** 3161

**UN No. (ADN)** 3161



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#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) LIQUEFIED GAS, FLAMMABLE, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene)

**Proper shipping name (IMDG)** LIQUEFIED GAS, FLAMMABLE, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene)

Proper shipping name (ICAO) LIQUEFIED GAS, FLAMMABLE, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene)

Proper shipping name (ADN) LIQUEFIED GAS, FLAMMABLE, N.O.S. (2,3,3,3-Tetrafluoroprop-1-ene)

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID classification code 2F

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

#### Transport labels



14.4. Packing group Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

The transport classifications provided here are for informational purposes only and are based solely on the properties of the unpackaged material described in this Safety Data Sheet. Transport classifications may differ depending on the type of transport, packaging sizes and variations, and regional and national regulations.

EmS F-D, S-U

ADR transport category 2

Emergency Action Code 2YE

Hazard Identification Number

23

(ADR/RID)

Tunnel restriction code (B/D)

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk Not applicable.

according to IMO instruments



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#### **SECTION 15: Regulatory information**

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

National regulations Health and Safety at Work etc. Act 1974 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI

2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.

EU legislation Commission Regulation (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 (REACH).

Commission Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on

classification, labelling and packaging of substances and mixtures (as amended).

Authorisations (SI 2020 No. 1577

Annex XIV) and REACH 1907/2006, Annex XIV

No specific authorisations are known for this product.

Restrictions (SI 2020 No. 1577 Annex XVII) and REACH

1907/2006, Annex XVII

Entry number: 40

Seveso Directive - Control of

major accident hazards

P2 Lower-tier 10 tonnes Upper-tier 50 tonnes.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.



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#### SECTION 16: Other information

in the safety data sheet

Abbreviations and acronyms used ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

CAS: Chemical Abstracts Service ATE: Acute Toxicity Estimate.

LC50: Lethal Concentration to 50 % of a test population.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

EC50: 50% of maximal Effective Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms

Press. Gas (Liq.) = Gas under pressure: Liquefied gas

Key literature references and

sources for data

Training advice

Source: European Chemicals Agency, http://echa.europa.eu/

Classification procedures according to SI 2019 No. 720

Press. Gas (Liq.) - H280: : Expert judgement., On basis of test data. Flam. Gas 1 - H220: Expert judgement., On basis of test data.

Issued by

Büşra TARAKCI / CRAD

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Note to organizer The certificate information is used exclusively for this SDS. No changes can be made to this SDS without

the knowledge and approval of the certificate holder or the certificate information can not be used for

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

another SDS. Otherwise, the certificate will assume no responsibility for the owner SDS.

Revision date 21/03/2023

Revision 1.1

Supersedes date 05/03/2021 SDS number 7884-2

Hazard statements in full H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.