Safety Data Sheet

According to Regulation EC No. 1907/2006

Kältespray 02 GP

Date of issue/Date of revision: 02.06.2017 Version 1.1

1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation: **Kältespray 02 GP**

1.2 Use of the substance/preparation: see procuct name

1.3 Company/undertaking identification

Company name: Gößl + Pfaff GmbH
Street: Münchener Str. 13
Place: 85123 Karlskron/Brautlach
Telephone: +49 (0) 8450 / 932-0
Fax.: +49 (0) 8450 / 932-13
Contact person: Management: Mr. Gößl, Mr. Pfaff
E-Mail: info@goessl-pfaff.de
Internet: www.goessl-pfaff.de
Responsible Department: Management

1.4 Emergency telephone +49 (0) 8450 / 932-0

Opening times

Monday till Thursday: 8.00 a.m.- 5.00 p.m.
Friday: 8.00 a.m.- 3.00 p.m.

2. Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Gases under pressure: Liquefied gas
Hazard Statements:
Contains gas under pressure; may explode if heated.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Hazard statements

H229 Pressurised container: May burst if heated.

Precautionary statements

P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

Refrigerated liquefied gas. Contact with the product can cause cold burns or frostbite.

3. Composition/information on ingredients

3.1. Substances

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene			100 %
	471-480-0		01-0000019758-54-	
	Liquefied gas; H280			

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

4. First aid measures

4.1. Description of first aid measures

General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation
Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

After contact with skin
Take off contaminated clothing and wash it before reuse. Treat frozen body-parts appropriately. In case of skin irritation, consult a physician.

After contact with eyes
Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion
Exposure route not applicable

4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically. Treat frozen body-parts appropriately. Do not give adrenaline or other stimulants.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media
Dry extinguishing powder,Foam, Carbon dioxide (CO2)
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media
High power water jet

5.2. Special hazards arising from the substance or mixture
In case of fire may be liberated: Hydrogen fluoride

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protection equipment.

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
No special measures are necessary.

6.4. Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Do not pierce or burn, even after use.

Advice on protection against fire and explosion
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Further information on handling
Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Oxidising agent

7.3. Specific end use(s)

see product name

8. Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene			
Worker DNEL, long-term		inhalation	systemic	3902 mg/m³
Consumer DNEL, long-term		inhalation	systemic	830 mg/m³

8.2. Exposure controls

Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Wear eye protection/face protection. Suitable eye protection: Eye glasses with side protection DIN EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. DIN EN 374
Suitable gloves type: Gloves with long cuffs, heat insulating
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Suitable respiratory protection apparatus: Self-contained respirator (breathing apparatus) (DIN EN 133)

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	like: Ether	
		Test method
pH-Value:	not applicable	
Changes in the physical state		
Melting point:	not applicable	
Initial boiling point and boiling range:	-19 °C	
Flash point:	not determined	
Sustaining combustion:	No data available	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties		
not applicable		
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Ignition temperature:	not applicable	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	368 °C	
Decomposition temperature:	not determined	
Oxidizing properties		
Not oxidising.		
Vapour pressure: (at 20 °C)	4271 hPa	
Vapour pressure: (at 50 °C)	10800 hPa	

Density (at 20 °C):	1,19 g/cm³
Water solubility: (at 20 °C)	insoluble

Solubility in other solvents

not determined

Partition coefficient:	2,01
Viscosity / dynamic:	not applicable
Vapour density:	not determined
Evaporation rate:	not determined
Solvent content:	not applicable

9.2. Other information

Solid content:	not applicable

10. Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Gases/vapours, toxic.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene				
	inhalative (4 h) vapour	LC50 >965 mg/l	Rat		OECD 403

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Practical experience

Other observations

Can cause frostbite. Inhalation causes narcotic effects/intoxication.

12. Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene					
	Acute fish toxicity	LC50 >117 mg/l	96 h	Cyprinus carpio (Common Carp)		
	Acute algae toxicity	ErC50 >170 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 > 160 mg/l	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene			
	Ozone depletion potential (ODP):	0		
	Global warming potential (GWP):	6		

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
29118-24-9	trans-1,3,3,3-Tetrafluoroprop-1-ene	2,01

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

The product has not been tested.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

13. Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.2

Classification code: 5A
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2

14.4. Packing group: -

Hazard label: 2.2

Classification code: 5A
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2.2

14.4. Packing group: -

Hazard label: 2.2

Special Provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS, non-flammable

14.3. Transport hazard class(es): 2.2

14.4. Packing group: -

Hazard label: 2.2

Special Provisions: A98 A145 A167 A802
Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No special measures are necessary.

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

not applicable

15. Regulatory information

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

EU regulatory information

2010/75/EU (VOC):	100 % (1190 g/l)
2004/42/EC (VOC):	100 % (1190 g/l)
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC , 2008/47/EC

Aerosol directive (75/324/EEC).

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	3 - highly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. Other information

Changes

This data sheet contains changes from the previous version in section(s):
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.

The product has no impact on the ozone layer and has only a minor impact on the greenhouse effect , making it neither affected by the Kyoto Protocol nor by F-Gas Regulation (No. 842/2006 / EC).