Femfresh™ Freshness deodorant (EU GHS (2020/878))

Safety Data Sheet

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

Revision Date: 20/07/2023 Date of Issue: 01/04/2019 Version: 2.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Form : Mixture

Product Name : Femfresh™ Freshness deodorant (EU GHS (2020/878))

Product Code : 300564 (LL041-38)

Synonyms : Femfresh™ Everyday Care Freshness Deodorant

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture : Aerosol – Deodorant

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

Company
Church & Dwight UK
Wear Bay Road, CT19 6PG
Folkestone, Kent – United Kingdom
+ 44 0800 121 6080 (Mon - Friday 9am - 4:30pm)
www.churchdwight.com
consumer.relationsUK@churchdwight.com

Company
Sofibel
110-114 RUE VICTOR HUGO
92300 LEVALLOIS PERRET
FRANCE
Téléphone :01.49.68.41.00
www.churchdwight.com

1.4. Emergency Telephone Number

Emergency Number : (+44) 08706006266 (24 hours) UK national information service;
(+44) 0800 1216080 (Mon - Friday 9am - 4:30pm)
For Medical Emergency: 1-888-234-1828 (USA and Canada), 952-853-1925 (Outside USA and Canada);
For Chemical Emergency: VelocityEHS (800)255-3924 (North America), +1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Aerosol 1	H222;H229
Aquatic Chronic 3	H412

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

2.2. Label Elements

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

Hazard Pictograms (CLP) :

GHS02

Signal Word (CLP) : Danger

Hazard Statements (CLP) : H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P273 - Avoid release to the environment.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 - Dispose of contents/container to hazardous or special waste collection

point, in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification : May displace oxygen and cause rapid suffocation. Contact with gas escaping the container can cause frostbite. Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

This substance/mixture does not meet the PBT/vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0.1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or 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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
n-Butane substance with national workplace exposure limit(s) (AT, BE, BG, DE, DK, EE, FI, FR, GB, GR, HR, HU, IE, LV, PL, SI, NO, CH)	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (EC Index-No.) 601-004-00-0	50 - 60	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Isobutane substance with national workplace exposure limit(s) (AT, DE, EE, FI, SI, CH)	(CAS-No.) 75-28-5 (EC-No.) 200-857-2 (EC Index-No.) 601-004-00-0	20 - 30	Flam. Gas 1A, H220 Press. Gas
Propane substance with national workplace exposure limit(s) (AT, BE, BG, DE, DK, EE, FI, GR, IE, LV, PL, PT, RO, SI, NO, CH)	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5	20 - 30	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
Hexamethyldisiloxane	(CAS-No.) 107-46-0 (EC-No.) 203-492-7	1 - 5	Flam. Liq. 2, H225 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Starch substance with national workplace exposure limit(s) (BE, BG, CZ, ES, GB, GR, HR, IE, PT, CH)	(CAS-No.) 9005-25-8 (EC-No.) 232-679-6	1 - 5	Not classified
Dipropylene glycol	(CAS-No.) 25265-71-8 (EC-No.) 246-770-3	≤ 0,2	Not classified
Chlorhexidine dihydrochloride	(CAS-No.) 3697-42-5 (EC-No.) 223-026-6	0,03 – 0,1	Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Propylene carbonate	(CAS-No.) 108-32-7 (EC-No.) 203-572-1 (EC Index-No.) 607-194-00-1	0,03 – 0,1	Eye Irrit. 2, H319

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 General : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-Aid Measures After Inhalation : First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact : For brief contact with a small amount: Rewarm with body heat. Get immediate medical advice/attention. For extensive contact or a large amount: Immediately call a poison center/doctor and follow their advice. Specific treatment is urgent, incorrect first-aid practices will aggravate the injury. Protect affected area with a loose cover until proper medical treatment is received.

First-Aid Measures After Eye Contact : Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-Aid Measures After Ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects : May cause frostbite on contact with the liquid. Asphyxia by lack of oxygen: risk of death.

Symptoms/Effects After Inhalation : In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death.

Symptoms/Effects After Skin Contact : Contact with gas/liquid escaping the container can cause frostbite and freeze burns.

Symptoms/Effects After Eye Contact : Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.

Symptoms/Effects After Ingestion : Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite.

Chronic Symptoms : None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media : Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, dry chemical, or sand.

Unsuitable Extinguishing Media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard : Flammable aerosol.

Explosion Hazard : Container may explode in heat of fire. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity : Reacts violently with strong oxidisers. Increased risk of fire or explosion.

Hazardous Combustion Products : Carbon oxides (CO, CO_2).

5.3. Advice for Firefighters

Precautionary Measures Fire : Exercise caution when fighting any chemical fire.

Firefighting Instructions : Use water spray or fog for cooling exposed containers. Fight fire remotely due to the risk of explosion. DO NOT fight fire when fire reaches containers. Evacuate area.

Protection During Firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures : Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Do not get in eyes, on skin, or on clothing. Do not breathe dust, gas.

6.1.1. For Non-Emergency Personnel

Protective Equipment : Use appropriate personal protective equipment (PPE).

Emergency Procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Responders

Protective Equipment : Equip cleanup crew with proper protection.

Emergency Procedures : Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area. Evacuate unnecessary personnel, isolate, and ventilate area. Eliminate ignition sources.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up : Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapours. Isolate the area until gas has dispersed. Ventilate and gas test area before entering.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed : Do not pressurize, cut, or weld containers. Pressurised container: May burst if heated. Do not pierce or burn, even after use. Asphyxiating gas at high concentrations.

Precautions for Safe Handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust, gas. Do not spray on an open flame or other ignition source.

Hygiene Measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions : Store in accordance with applicable national storage class systems. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep only in the original container in a cool, well ventilated place away from ignition sources. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

Incompatible Materials : Strong oxidizers.

7.3. Specific End Use(S)

Aerosol – Deodorant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

n-Butane (106-97-8)		
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	1900 mg/m³ (Butane (all isomers))
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	800 ppm (Butane (all isomers))
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	3800 mg/m³
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	1600 ppm
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	2370 mg/m³
Belgium	OEL STEL (Legal Basis:Royal Decree 21/01/2020)	980 ppm
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	1900 mg/m³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	1450 mg/m³ 22 mg/m³ (containing >=0.1% Butadiene)
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	600 ppm 10 ppm (containing >=0.1% Butadiene)
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	1810 mg/m³
Croatia	OEL STEL (Legal Basis:OG No. 91/2018)	750 ppm
Croatia	OEL Chemical Category (Legal Basis:OG No. 91/2018)	Carcinogen Category 1A containing >=0.1% Butadiene, Mutagen Category 1B containing >=0.1% Butadiene
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	1200 mg/m³
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	500 ppm
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	1500 mg/m³
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	800 ppm
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	1900 mg/m³ (suffocating gas that displaces oxygen (Butane)
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	800 ppm (suffocating gas that displaces oxygen (Butane)
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	2400 mg/m³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	1000 ppm
France	OEL TWA (Legal Basis:INRS ED 984)	1900 mg/m³

France	OEL TWA (Legal Basis:INRS ED 984)	800 ppm
Germany	OEL TWA (Legal Basis:TRGS 900)	2400 mg/m³
Germany	OEL TWA (Legal Basis:TRGS 900)	1000 ppm
Greece	OEL TWA (Legal Basis:PWHSE)	2350 mg/m³
Greece	OEL TWA (Legal Basis:PWHSE)	1000 ppm
Hungary	OEL TWA (Legal Basis:Decree No. 05/2020)	2350 mg/m³
Hungary	OEL STEL (Legal Basis:Decree No. 05/2020)	9400 mg/m³
Ireland	OEL TWA (Legal Basis:2020 COP)	1000 ppm (Aliphatic hydrocarbon gases - Alkanes (C1-C4))
Ireland	OEL STEL (Legal Basis:2020 COP)	3000 ppm (calculated)
USA ACGIH	OEL STEL (Legal Basis:IMDFN1)	1000 ppm (explosion hazard (Butane, isomers)
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	300 mg/m³
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	600 mg/m³
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	250 ppm
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	750 mg/m³ (value calculated)
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	312,5 ppm (value calculated)
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	1900 mg/m³
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	3000 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	2400 mg/m³ (containing >=0.1% Butadiene)
Slovenia	OEL TWA (Legal Basis:No. 79/19)	1000 ppm (containing >=0.1% Butadiene)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	9600 mg/m³ (containing >=0.1% Butadiene)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	4000 ppm (containing >=0.1% Butadiene)
Slovenia	OEL Chemical Category (Legal Basis:No. 79/19)	Category 1B containing >=0.1% Butadiene, Category 1A containing >=0.1% Butadiene
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	7600 mg/m³ (Butane)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	3200 ppm (Butane)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	1900 mg/m³ (Butane (all isomers))
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	800 ppm (Butane (all isomers))

Isobutane (75-28-5)		
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	1900 mg/m³ (Butane (all isomers))
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	800 ppm (Butane (all isomers))
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	3800 mg/m³ (Butane both isomers)
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	1600 ppm (Butane both isomers)
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	1900 mg/m³
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	800 ppm
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	1900 mg/m³ (suffocating gas that displaces oxygen (Butane)
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	800 ppm (suffocating gas that displaces oxygen (Butane)
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	2400 mg/m³ (Butane)
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	1000 ppm (Butane)
Germany	OEL TWA (Legal Basis:TRGS 900)	2400 mg/m³
Germany	OEL TWA (Legal Basis:TRGS 900)	1000 ppm
USA ACGIH	OEL STEL (Legal Basis:IMDFN1)	1000 ppm (explosion hazard (Butane, isomers)
Slovenia	OEL TWA (Legal Basis:No. 79/19)	2400 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	1000 ppm
Slovenia	OEL STEL (Legal Basis:No. 79/19)	9600 mg/m³
Slovenia	OEL STEL (Legal Basis:No. 79/19)	4000 ppm
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	7600 mg/m³ (Butane)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	3200 ppm (Butane)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	1900 mg/m³ (including Butane (all isomers)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	800 ppm (including Butane (all isomers)

Propane (74-98-6)		
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	1800 mg/m³
Austria	OEL TWA (Legal Basis:BGBl. II Nr. 254/2018)	1000 ppm
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	3600 mg/m³
Austria	OEL STEL (Legal Basis:BGBl. II Nr. 254/2018)	2000 ppm
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	1000 ppm (gas)
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	1800 mg/m³
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	1800 mg/m³
Denmark	OEL TWA (Legal Basis:BEK No. 698 of 28/05/2020)	1000 ppm

Estonia	OEL TWA (Legal Basis:Regulation No. 105)	1800 mg/m³
Estonia	OEL TWA (Legal Basis:Regulation No. 105)	1000 ppm
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	1500 mg/m³ (suffocating gas that displaces oxygen)
Finland	OEL TWA (Legal Basis:HTP-ARVOT 2020)	800 ppm (suffocating gas that displaces oxygen)
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	2000 mg/m³
Finland	OEL STEL (Legal Basis:HTP-ARVOT 2020)	1100 ppm
Germany	OEL TWA (Legal Basis:TRGS 900)	1800 mg/m³
Germany	OEL TWA (Legal Basis:TRGS 900)	1000 ppm
Greece	OEL TWA (Legal Basis:PWHSE)	1800 mg/m³
Greece	OEL TWA (Legal Basis:PWHSE)	1000 ppm
Ireland	OEL STEL (Legal Basis:2020 COP)	3000 ppm (calculated (Aliphatic hydrocarbon gases - Alkanes (C1-C4))
Ireland	OEL Chemical Category (Legal Basis:Decree No. 05/2020)	Simple asphyxiant
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	1800 mg/m³
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	1000 ppm
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	900 mg/m³
Norway	OEL TWA (Legal Basis:FOR-2020-04-06-695)	500 ppm
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	1125 mg/m³ (value calculated)
Norway	OEL STEL (Legal Basis:FOR-2020-04-06-695)	625 ppm (value calculated)
Poland	OEL TWA (Legal Basis:Dz. U. 2020 Nr. 61)	1800 mg/m³
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	1000 ppm
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	1400 mg/m³
Romania	OEL TWA (Legal Basis:Gov. Dec. No 1.218)	778 ppm
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	1800 mg/m³
Romania	OEL STEL (Legal Basis:Gov. Dec. No 1.218)	1000 ppm
Slovenia	OEL TWA (Legal Basis:No. 79/19)	1800 mg/m³
Slovenia	OEL TWA (Legal Basis:No. 79/19)	1000 ppm
Slovenia	OEL STEL (Legal Basis:No. 79/19)	7200 mg/m³
Slovenia	OEL STEL (Legal Basis:No. 79/19)	4000 ppm
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	7200 mg/m³
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	4000 ppm
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	1800 mg/m³
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	1000 ppm

Starch (9005-25-8)		
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	10 mg/m³
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	10 mg/m³ (dust, inhalable fraction (Plant origin dust)
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	4 mg/m³ (respirable dust) 10 mg/m³ (total dust, inhalable particles)
Czech Republic	OEL TWA (Legal Basis:Reg. 41/2020)	4 mg/m³ (dust)
Greece	OEL TWA (Legal Basis:PWHSE)	10 mg/m³ (inhalable fraction) 5 mg/m³ (respirable fraction)
Ireland	OEL TWA (Legal Basis:2020 COP)	10 mg/m³ (total inhalable dust) 4 mg/m³ (respirable dust)
Ireland	OEL STEL (Legal Basis:2020 COP)	30 mg/m³ (calculated-respirable dust (Borates) 12 mg/m³ (calculated)
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	10 mg/m³
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	10 mg/m³
Portugal	OEL Chemical Category (Legal Basis:Portuguese Norm NP 1796:2014)	A4 - Not Classifiable as a Human Carcinogen
Spain	OEL TWA (Legal Basis:OELCAIS)	10 mg/m³
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	3 mg/m³ (respirable dust)

Propylene carbonate (108-32-7)		
Germany	OEL TWA (Legal Basis:TRGS 900)	8,5 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	OEL TWA (Legal Basis:TRGS 900)	2 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Latvia	OEL TWA (Legal Basis:Reg. No. 325)	2 mg/m³
Lithuania	OEL TWA (Legal Basis:HN 23:2011)	7 mg/m³
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	25,5 mg/m³
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	6 ppm

Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	25,5 mg/m³
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	6 ppm
Dipropylene glycol (25265-71-8)		
Germany	OEL TWA (Legal Basis:TRGS 900)	100 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Slovenia	OEL TWA (Legal Basis:No. 79/19)	100 mg/m³ (inhalable fraction)
Slovenia	OEL STEL (Legal Basis:No. 79/19)	200 mg/m³ (inhalable fraction)
Switzerland	OEL STEL (Legal Basis:OLVSNAIF)	280 mg/m³ (aerosol, inhalable dust, vapour)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	140 mg/m³ (aerosol, inhalable dust, vapour)

8.2. Exposure Controls

Appropriate Engineering Controls : For occupational/workplace settings: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Use explosion-proof equipment. Gas detectors should be used when flammable gases or vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Oxygen detectors should be used when asphixiating gases may be released.

Personal Protective Equipment : For occupational/workplace settings and bulk quantities: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Respiratory protection of the dependent type. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.

Materials for Protective Clothing : For occupational/workplace settings: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection : For occupational/workplace settings: Wear protective gloves. If material is cold, wear thermally resistant protective gloves.

Eye Protection : For occupational/workplace settings: Chemical safety goggles.

Skin and Body Protection : For occupational/workplace settings: Wear suitable protective clothing.

Respiratory Protection : Use a NIOSH-approved self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Thermal Hazard Protection : Wear thermally resistant protective clothing.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Colour, Appearance : Colourless Aerosol

Colour : No data available

Odour : Comparable to reference

Odour Threshold : No data available

pH : Not available

Evapouration Rate : No data available

Melting Point : -68 °C

Freezing Point : Not available

Boiling Point : 100 °C

Flash Point : -3,3 °C Penksy-Martens Closed Cup

Auto-Ignition Temperature : Not available

Decomposition Temperature : No data available

Flammability : Extremely flammable aerosol

Vapour Pressure : No data available

Relative Vapour Density At 20°C : No data available

Relative Density : No data available

Solubility : Insoluble in water.

Partition Coefficient n-Octanol/Water : No data available
Viscosity : No data available
Explosive Properties : Contains gas under pressure; may explode if heated.
Oxidising Properties : No data available
Explosive Limits : Not available
Particle Aspect Ratio : Not applicable
Particle Aggregation State : Not applicable
Particle Agglomeration State : Not applicable
Particle Specific Surface Area : Not applicable
Particle Dustiness : Not applicable

9.2. Other Information

% of flammable ingredients : 96,3670112
Gas Group : Compressed gas
Gas group : Compressed gas

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reacts violently with strong oxidisers. Increased risk of fire or explosion.

10.2. Chemical Stability

Flammable aerosol. Pressurized container: may burst if heated.

10.3. Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials

Strong oxidizers.

10.6. Hazardous Decomposition Products

None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (Ec) No 1272/2008

Likely Routes of Exposure : Dermal, Eye Contact, Inhalation, Oral
Acute Toxicity (Oral) : Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation) : Not classified (Based on available data, the classification criteria are not met)

n-Butane (106-97-8)	
LC50 Inhalation Rat	30957 mg/m³ (Exposure time: 4 h)

Propane (74-98-6)	
LC50 Inhalation Rat	> 800000 ppm (Exposure time: 15 min)

Hexamethyldisiloxane (107-46-0)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	106 mg/l/4h

Propylene carbonate (108-32-7)	
LD50 Oral Rat	29000 mg/kg
LD50 Dermal Rabbit	> 3000 mg/kg

Dipropylene glycol (25265-71-8)	
LD50 Oral Rat	14850 mg/kg
LD50 Dermal Rabbit	> 5010 mg/kg

Skin Corrosion/Irritation : Not classified (Based on available data, the classification criteria are not met)
Eye Damage/Irritation : Not classified (Based on available data, the classification criteria are not met)
Respiratory or Skin Sensitization : Not classified (Based on available data, the classification criteria are not met)
Germ Cell Mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive Toxicity : Not classified (Based on available data, the classification criteria are not met)

Specific Target Organ Toxicity (Single Exposure) : Not classified (Based on available data, the classification criteria are not met)

Specific Target Organ Toxicity (Repeated Exposure) : Not classified (Based on available data, the classification criteria are not met)

Aspiration Hazard : Not classified (Based on available data, the classification criteria are not met)

Symptoms/Injuries After Inhalation : In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death.

Symptoms/Injuries After Skin Contact : Contact with gas/liquid escaping the container can cause frostbite and freeze burns.

Symptoms/Injuries After Eye Contact : Contact with gas/liquid escaping the container can cause frostbite, freeze burns, and permanent eye damage.

Symptoms/Injuries After Ingestion : Not considered a potential route of exposure, but contact with gas/liquid escaping the container can cause freeze burns and frostbite.

Chronic Symptoms : None known.

11.2. Information On Other Hazards

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short–Term (Acute) : Not classified (Based on available data, the classification criteria are not met)

Hazardous To The Aquatic Environment, Long–Term (Chronic) : Harmful to aquatic life with long lasting effects.

Hexamethyldisiloxane (107-46-0)	
LC50 - Fish [1]	3,02 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 - Fish [2]	0,46 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
ErC50 algae	0,55 mg/l
NOEC chronic crustacea	0,08 mg/l

Chlorhexidine dihydrochloride (3697-42-5)	
LC50 - Fish [1]	1 – 1,8 mg/kg (Species: Danio rerio)
EC50 - Crustacea [1]	0,055 mg/l

Propylene carbonate (108-32-7)	
LC50 - Fish [1]	> 1000 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 - Crustacea [1]	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 algae	> 929 mg/l (Exposure time: 96 h - Species: Selenastrum capricornutum [static])

Dipropylene glycol (25265-71-8)	
EC50 - Crustacea [1]	> 100 mg/l (Exposure Time: 48 h - Species: Daphnia magna)
ErC50 algae	> 100 mg/l (Exposure Time: 72 h - Species: Desmodesmus subspicatus)
NOEC chronic algae	> 100 mg/l (Exposure Time: 72 h - Species: Desmodesmus subspicatus)

12.2. Persistence and Degradability

Femfresh™ Freshness deodorant (EU GHS (2020/878))	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Femfresh™ Freshness deodorant (EU GHS (2020/878))	
Bioaccumulative Potential	Not established.

n-Butane (106-97-8)	
Log POW	2,31 (at 20 °C (at pH 7)

Isobutane (75-28-5)	
BCF Fish 1	1,57 – 1,97
Log POW	1,09 – 2,8 (at 20 °C (at pH 7)

Propane (74-98-6)	
Log POW	1,09 (at 20 °C (at pH 7)

Hexamethyldisiloxane (107-46-0)	
BCF Fish 1	1290 – 2410
Log POW	5,06 (at 20 °C)
Chlorhexidine dihydrochloride (3697-42-5)	
Log POW	-1,94 (at 22.2 °C (at pH 3.2-4.2)
Propylene carbonate (108-32-7)	
Log POW	0,48 (at 25 °C)
Dipropylene glycol (25265-71-8)	
BCF Fish 1	0,3 (0,3 – 1,4)
Log POW	-0,462 (at 21.7 °C (at pH 6)

12.4. Mobility in Soil
No additional information available

12.5. Results of PBT and vPvB Assessment
Does not contain any PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XVIII

12.6. Endocrine Disrupting Properties
Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects
Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods
Product/Packaging Disposal Recommendations : Dispose of contents/container in accordance with local, regional, national, and international regulations. Do not pierce or burn, even after use.
Additional Information : Do not puncture or incinerate container.
Ecology - Waste Materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION
The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN Number or ID Number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN Proper Shipping Name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
14.3. Transport Hazard Class				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing Group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental Hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the

ADR	IMDG	IATA	ADN	RID
environment : No	environment : No Marine pollutant : No	environment : No	environment : No	environment : No

14.6. Special Precautions For User

No additional information available

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

15.1.1. EU-Regulations

15.1.1.1. REACH Annex XVII Information

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Hexamethyldisiloxane ; Propylene carbonate
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Femfresh™ Freshness deodorant (EU GHS (2020/878)) ; Hexamethyldisiloxane
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Propylene carbonate
3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Femfresh™ Freshness deodorant (EU GHS (2020/878)) ; Hexamethyldisiloxane
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	n-Butane ; Isobutane ; Propane ; Hexamethyldisiloxane

15.1.1.2. REACH Candidate List Information

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

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information

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

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information

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

15.1.1.5. REACH Annex XIV Information

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

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information

No additional information available

15.1.1.7. EC Inventory Information

n-Butane (106-97-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Isobutane (75-28-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Propane (74-98-6)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Hexamethyldisiloxane (107-46-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Chlorhexidine dihydrochloride (3697-42-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Starch (9005-25-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Propylene carbonate (108-32-7)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Dipropylene glycol (25265-71-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.1.8. Other Information

No additional information available

15.1.2. National Regulations

No additional information available

15.1.3. International Inventory Lists

n-Butane (106-97-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Isobutane (75-28-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Propane (74-98-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Hexamethyldisiloxane (107-46-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Chlorhexidine dihydrochloride (3697-42-5)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Starch (9005-25-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Propylene carbonate (108-32-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

Dipropylene glycol (25265-71-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the Canadian DSL (Domestic Substances List)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the NCI (Vietnam - National Chemical Inventory)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision : 20/07/2023

Data Sources : Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.

Other Information : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Press. Gas	Gases under pressure

Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas

Classification and Procedure Used to Derive the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:

Aerosol 1	On basis of test data
Aquatic Chronic 3	Calculation method

Indication of Changes

Section	Change	Date Changed	Version
1, 2, 3, 5, 9, 11, 12	Modified	20/07/2023	2.0

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
BEI - Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. - Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 - Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) - IMDG Emergency Schedule Fire
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
EU – European Union
ErC50 - EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC Code - International Bulk Chemical Code
IMDG - International Maritime Dangerous Goods
IPRV - Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution
NDS - Najwyzsze Dopuszczalne Stezenie
NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe
NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NRD - Nevirsytinas Ribinis Dydis
NTP – National Toxicology Program
OEL - Occupational Exposure Limits
PBT - Persistent, Bioaccumulative and Toxic
PEL - Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT - Self Accelerating Decomposition Temperature
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
STOT - Specific Target Organ Toxicity
TA-Luft - Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPRD - Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
VLA-ED - Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendements

EU - 2019/1831 EU in accor. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.

EU - 2019/1243/EU, and 98/24/EC) - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.

Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBL. II) No 119/2004) & BGBI. II No. 242/2006, BGBI. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.

Austria - BLV BGBl. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBl. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBl. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to

Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.

Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents

Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1

Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last amended: January 2020

Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1)

Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 - Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011

carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 -
Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

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