

SAFETY DATA SHEET**PRF Booster**

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 28.12.2022

Revision date 22.02.2023

1.1. Product identifier

Product name PRF Booster

Article no. PEB00S52

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

Use of the substance / mixture Cleaning agent PC-CLN-OTH Other cleaning, care and maintenance products (excludes biocidal products)

1.3. Details of the supplier of the safety data sheet

Company name Taerosol Oy

Postal address Hampuntie 21

Postcode 36220

City Kangasala

Country Finland

Telephone number +358 33565600

Website www.taerosol.com

Enterprise No. 02847686

1.4. Emergency telephone number

Emergency telephone Telephone number: 112 / Finnish Poison Information Center: 0800 147 111, 24/7

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS] Aerosol 1; H222,H229

Substance / mixture hazardous properties	May explode if heated Vapours may form explosive mixture with air.
Additional information on classification	For the full text of the statements mentioned in this Section, see Section 16.

2.2. Label elements

Hazard pictograms (CLP)



Signal word	Danger
Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Precautionary statements	P102 Keep out of reach of children. 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. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.

2.3. Other hazards

PBT / vPvB	See section 12.5
Health effect	See section 11.2

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
2-butoxyethanol	CAS No.: 111-76-2	Acute Tox. 4; H332	< 5 %	
	EC No.: 203-905-0	Acute Tox. 4; H312		
	REACH Reg. No.:	Acute Tox. 4; H302		
	01-2119475108-36-XXXX	Skin Irrit. 2; H315		
		Eye Irrit. 2; H319		
Propan-2-ol	CAS No.: 67-63-0	Flam. Liq. 2; H225	< 2 %	
	EC No.: 200-661-7	Eye Irrit. 2; H319		
	REACH Reg. No.:	STOT SE 3; H336		
	01-2119457558-25-XXXX			
Substance comments	Aerosol propellants: Propane Butane Isobutane Contains: aliphatic hydrocarbons 5-15 %, EDTA and salts thereof < 5 % For the full text of the statements mentioned in this Section, see Section 16.			

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. When symptoms persist or in all cases of doubt seek medical advice.
------------	--

Skin contact	Rinse skin with water/shower. When symptoms persist or in all cases of doubt seek medical advice.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When symptoms persist or in all cases of doubt seek medical advice.
Ingestion	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

General symptoms and effects	None known.
------------------------------	-------------

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

Medical treatment	Treat symptomatically.
-------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Improper extinguishing media	Water spray

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	May explode if heated Vapours may form explosive mixture with air.
Hazardous combustion products	Carbon dioxide (CO ₂) Carbon monoxide (CO)

5.3. Advice for firefighters

Personal protective equipment	In accordance with the requirements of EN 469, firefighter's clothing with a helmet, protective boots and gloves provides a basic level of protection against chemical accidents. In case of inadequate ventilation wear respiratory protection. See section 8.2
Fire fighting procedures	Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Use personal protective equipment. See section 8.2 Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Stop leak if safe to do so. Evacuate area.
For emergency responders	Use personal protective equipment. See section 8.2

6.2. Environmental precautions

Environmental precautionary measures	Try to prevent the material from entering drains or water courses.
--------------------------------------	--

6.3. Methods and material for containment and cleaning up

Containment	Prevent further leakage or spillage if safe to do so. Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.
Clean up	Absorb spillage to prevent material damage. Non-sparking tools should be used.

6.4. Reference to other sections

Other instructions	See section 7, 8, 13
--------------------	----------------------

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Remove all sources of ignition. Take precautionary measures against static discharges. Non-sparking tools should be used. Ground and bond container and receiving equipment. Keep away from oxidising agents and strongly acid or alkaline materials. Try to prevent the material from entering drains or water courses. Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
----------	---

7.2. Conditions for safe storage, including any incompatibilities

Storage	Remove all sources of ignition. Keep away from oxidising agents and strongly acid or alkaline materials. Take precautionary measures against static discharge. Ground / bond container and receiving equipment. Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122 °F. Keep away from food, drink and animal feedingstuffs. Keep only in original container.
---------	--

7.3. Specific end use(s)

Specific use(s)	None known.
-----------------	-------------

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
2-butoxyethanol	CAS No.: 111-76-2	Country of origin: EU Limit value (8 h) : 98 mg/m ³ Limit value (8 h) : 20 ppm Limit value (short term) Value: 246 mg/m ³ Limit value (short term) Appraisal period: 15 min Limit value (short term) Value: 50 ppm Limit value (short term) Appraisal period: 15 min Recommended monitoring procedures: This information is not available.	

Propan-2-ol	CAS No.: 67-63-0	<p>Source: 2000/39/EY</p> <p>Comments: Skin</p> <p>Country of origin: FI</p> <p>Limit value (8 h) : 200 ppm</p> <p>Limit value (8 h) : 500 mg/m³</p> <p>Limit value (short term)</p> <p>Value: 250 ppm</p> <p>Limit value (short term)</p> <p>Value: 620 mg/m³</p> <p>Limit value (short term)</p> <p>Appraisal period: 15 min</p> <p>Recommended monitoring procedures: This information is not available.</p> <p>Source: Decree of the Ministry of Social Affairs and Health on concentrations known to be harmful (654/2020)</p>
-------------	------------------	--

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	See section 7.1, 7.2
----------------------------------	----------------------

Eye / face protection

Eye protection equipment	<p>Description: Usual safety precautions while handling the product will provide adequate protection against this potential effect. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.</p> <p>Reference to relevant standard: SFS-EN ISO 4007:2018</p> <p>SFS-EN ISO 16321-1:2022</p> <p>SFS-EN ISO 18526-1:2020</p> <p>SFS-EN ISO 16321-3:2022</p> <p>SFS-EN ISO 16321-2:2021</p> <p>SFS-EN ISO 18526-3:2020</p> <p>SFS-EN ISO 18526-2:2020</p> <p>SFS-EN ISO 18526-4:2020</p> <p>SFS-EN ISO 19734:2021</p> <p>SFS-EN 13911:2017</p> <p>SFS-EN 16473</p> <p>SFS-EN 167</p> <p>SFS-EN 168</p> <p>SFS-EN 443</p>
--------------------------	---

Hand protection

Breakthrough time	<p>Comments: As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain,</p>
-------------------	--

Thickness of glove material	duration of contact). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Hand protection equipment	<p>Comments: As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.</p> <p>Description: Usual safety precautions while handling the product will provide adequate protection against this potential effect. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible.</p> <p>Reference to relevant standard: SFS-EN ISO 374-1:2017 SFS-EN ISO 374-5:2017 SFS-EN 511 SFS-EN 659 + A1 SFS-EN 1082-1 SFS-EN 1082-2 SFS-EN 1082-3 SFS-EN 14325:2018 SFS-EN 16350</p>

Skin protection

Recommended protective clothing	<p>Description: Usual safety precautions while handling the product will provide adequate protection against this potential effect. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible.</p> <p>Reference to relevant standard: SFS-EN 863 SFS-EN 1149-2 SFS-EN 1149-3 SFS-EN 13034 + A1 SFS-EN 16689:2017 SFS-EN ISO 6530 CEN ISO/TR 11610 SFS-EN ISO 11612 SFS-EN ISO 13688 SFS-EN ISO 13982-1 SFS-EN ISO 13982-2 SFS-EN ISO 13995 SFS-EN ISO 13997 SFS-EN ISO 14116 SFS-EN 15090 CEN ISO/TR 18690</p>
---------------------------------	---

Respiratory protection

Recommended respiratory protection	<p>Description: Usual safety precautions while handling the product will provide adequate protection against this potential effect. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Use respirator when performing operations</p>
------------------------------------	--

involving potential exposure to vapour of the product. In case of inadequate ventilation wear respiratory protection. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Reference to relevant standard: SFS-EN ISO 16972:2020

SFS-EN 13274-1
SFS-EN 148-1:2019
SFS-EN 144-1:2018
SFS-EN 14593-1:2018
SFS-EN 1146
SFS-EN 12021
SFS-EN 12083 + AC
SFS-EN 12941 + A1 + A2
SFS-EN 12942 + A1 + A2
SFS-EN 13274-2:2019
SFS-EN 13274-4:2020
SFS-EN 13274-5
SFS-EN 13274-6
SFS-EN 13274-3
SFS-EN 13274-8
SFS-EN 13274-5
SFS-EN 13274-7:2019
SFS-EN 134
SFS-EN 135
SFS-EN 136 + AC
SFS-EN 137
SFS-EN 13794
SFS-EN 138
SFS-EN 140 + AC
SFS-EN 142
SFS-EN 143:2021
SFS-EN 14387:2021
SFS-EN 144-3 + AC
SFS-EN 144-2:2018
SFS-EN 14435
SFS-EN 145/A1
SFS-EN 145
SFS-EN 14529
SFS-EN 14594:2018
SFS-EN 148-2
SFS-EN 148-3
SFS-EN 149 + A1
SFS-EN 15333-2
SFS-EN 1825-2
SFS-EN 1827 + A1
SFS-EN 250
SFS-EN 269
SFS-EN 402
SFS-EN 403
SFS-EN 404
SFS-EN 405 + A1
SFS-EN 529

Thermal hazards

Thermal hazards	Not applicable.
-----------------	-----------------

Appropriate environmental exposure control

Environmental exposure controls	See section 6.2
---------------------------------	-----------------

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Aerosol dispenser: foam aerosol
Colour	clear
Odour	odourless
Odour limit	Reason for waiving data: No data.
pH	Comments: This information is not available.
Melting point / melting range	Reason for waiving data: No data.
Boiling point / boiling range	Reason for waiving data: No data.
Flash point	Reason for waiving data: Not applicable
Flammability	Not applicable.
Lower explosion limit with unit of measurement	Reason for waiving data: No data.
Upper explosion limit with units of measurement	Reason for waiving data: No data.
Vapour pressure	Reason for waiving data: No data.
Vapour density	Reason for waiving data: Not applicable
Particle characteristics	Reason for waiving data: Not applicable
Relative density	Reason for waiving data: Not applicable
Density	Reason for waiving data: Not applicable
Solubility	Comments: This information is not available.
Partition coefficient: n-octanol/water	Reason for waiving data: No data.
Auto-ignition temperature	Reason for waiving data: Not applicable
Decomposition temperature	Reason for waiving data: Not applicable
Viscosity	Type: Kinematic Reason for waiving data: Not applicable

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	This information is not available.
----------------------------------	------------------------------------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	See section 5.2
------------	-----------------

10.2. Chemical stability

Stability	Stable
-----------	--------

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	See section 5.2
------------------------------------	-----------------

10.4. Conditions to avoid

Conditions to avoid	See section 7.1, 7.2
---------------------	----------------------

10.5. Incompatible materials

Materials to avoid	See section 7.1, 7.2
--------------------	----------------------

10.6. Hazardous decomposition products

Hazardous decomposition products	See section 5.2
----------------------------------	-----------------

SECTION 11: Toxicological information

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

Substance	2-butoxyethanol
Acute toxicity	Effect tested: LD50 Route of exposure: Oral Value: 470 mg/kg Animal test species: Rat Effect tested: LC50 Route of exposure: Inhalation. Duration: 4 hour(s) Value: 2,2 mg/l Animal test species: Rabbit Effect tested: LD50 Route of exposure: Dermal Value: 100 mg/kg Animal test species: Rabbit
Substance	Propan-2-ol
Acute toxicity	Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Animal test species: Rat Effect tested: LD50

Route of exposure: Dermal
Value: > 2000 mg/kg
Animal test species: Rabbit

Effect tested: LC50
Route of exposure: Inhalation.
Duration: 8 hour(s)
Value: > 20 mg/l
Animal test species: Rat

Other information regarding health hazards

Acute toxicity, mixture estimate	Dose: ATEmix calculated Route of exposure: Oral Value: > 2000 mg/kg Dose: ATEmix calculated Route of exposure: Dermal Value: > 2000 mg/kg Dose: ATEmix calculated Route of exposure: Inhalation (vapour) Value: > 20,0 mg/l
Assessment of acute toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Based on available data, the classification criteria are not met.
Assessment of eye damage or irritation, classification	Based on available data, the classification criteria are not met.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	See section 4.2
----------------------	-----------------

In case of skin contact	See section 4.2
In case of inhalation	See section 4.2
In case of eye contact	See section 4.2

11.2 Other information

Endocrine disruption	This information is not available.
----------------------	------------------------------------

SECTION 12: Ecological information

12.1. Toxicity

Substance	2-butoxyethanol
Aquatic toxicity, fish	Value: 220 mg/l Effect dose concentration: LC50 Exposure time: 96 hour(s)
Substance	Propan-2-ol
Aquatic toxicity, fish	Toxicity type: Acute Value: 6550 - 11300 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s)
Substance	Propan-2-ol
Aquatic toxicity, algae	Toxicity type: Acute Value: > 1000 mg/l Effect dose concentration: EC50 Test duration: 72 hour(s)
Substance	2-butoxyethanol
Aquatic toxicity, crustacean	Value: 1.815 mg/l Effect dose concentration: EC50 Test duration: 24 hour(s) Species: Daphnia magna
Substance	Propan-2-ol
Aquatic toxicity, crustacean	Toxicity type: Acute Value: ~ 9700 mg/l Effect dose concentration: EC50 Test duration: 24 hour(s) Species: Daphnia magna

12.2. Persistence and degradability

Substance	Propan-2-ol
Biodegradability	Comments: Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	This information is not available.
-----------------------------	------------------------------------

12.4. Mobility in soil

Substance	Propan-2-ol
Water / air volatility rate	Comments: Volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This information is not available.
------------------------------------	------------------------------------

12.6. Endocrine disrupting properties

Endocrine disrupting properties	This information is not available.
---------------------------------	------------------------------------

12.7. Other adverse effects

Additional ecological information	This information is not available.
-----------------------------------	------------------------------------

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Dispose of product residue in accordance with the instructions of the person responsible for waste disposal. Avoid putting the substance into waste water.
Appropriate methods of disposal for the contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Where possible recycling is preferred to disposal. Do not pierce or burn, even after use.
EU Regulations	Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	1950
IMDG	1950
ICAO/IATA	1950

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	AEROSOLS
ADR/RID/ADN	AEROSOLS
IMDG	AEROSOLS
ICAO/IATA	AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR/RID/ADN	2.1
Classification code ADR/RID/ADN	5F

14.4. Packing group

Comments	-
----------	---

14.5. Environmental hazards

Comments	No
----------	----

14.6. Special precautions for user

Special safety precautions for user	This information is not available.
-------------------------------------	------------------------------------

14.7. Maritime transport in bulk according to IMO instruments

Product name	AEROSOLS, FLAMMABLE
--------------	---------------------

Additional information

Hazard label ADR/RID/ADN	2.1
Hazard label IMDG	2.1
Hazard label ICAO/IATA	2.1

ADR/RID Other information

Tunnel restriction code	D
Limited quantity	1 L
Excepted quantity	E0
Special provisions	190 327 344 625
Transport category	2

ADN Other information

Special provisions	190 327 344 625
Limited quantity	1 L
Excepted quantity	E0

IMDG Other information

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

ICAO/IATA Other information

Limited quantity	30 kg
Excepted quantity	E0
Special provisions	A145 A165 A802

Additional information ICAO/IATA

Cargo: max. 150 kg (203), Pas.: max. 75 kg (203)

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

Legislation and regulations

Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents The rules which cover amongst other things the requirement for ventilation, protective clothing, personal protective equipment etc. can be obtained from the National Occupational Health and Safety Board.

15.2. Chemical safety assessment

Chemical safety assessment performed

No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

CLP classification, notes

Calculation method.
Bridging principle "Aerosols"

Training advice

Provide adequate information, instruction and training for operators. Take notice of the directions of use on the label. To avoid risks to man and the environment, comply with the instructions for use.

Key literature references and sources for data

Information taken from reference works and the literature.
<http://echa.europa.eu>
<http://eur-lex.europa.eu>
<http://echa-term.echa.europa.eu>
Ingredient Safety Data Sheets

Abbreviations and acronyms used

CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = derived minimal effect level
DNEL = derived no-effect level
EC50 = The effective concentration of substance that causes 50% of the maximum response.
ECHA = European Chemicals Agency
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
EEA = European Economic Area
EU = European Union

	<p>EC number = The three European lists of substances from the previous EU chemicals regulatory framework, EINECS, ELINCS and the NLP-list, in combination are called the EC Inventory. The EC Inventory is the source for the seven-digit EC number, an identifier of substances commercially available within the European Union.</p> <p>GHS = Global Harmonised System</p> <p>SDS = safety data sheet</p> <p>LC50 = median lethal concentration</p> <p>LDx = lethal dose x%</p> <p>LOAEC = lowest observed adverse effect concentration</p> <p>LOAEL = lowest observed adverse effect level</p> <p>LOEC = lowest observed effect concentration</p> <p>LOEL = lowest observed effect level</p> <p>NOAEC = no observed adverse effect concentration</p> <p>NOAEL = no observed adverse effect level</p> <p>NOEC = no observed effect concentration</p> <p>NOEL = no observed effect level</p> <p>PBT = persistent, bioaccumulative and toxic</p> <p>PNEC = predicted no-effect concentration</p> <p>ppm = parts per million</p> <p>QSAR = quantitative structure-activity relationship</p> <p>REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals</p> <p>STOT = specific target organ toxicity</p> <p>UFI = unique formula identifier</p> <p>vPvB = very persistent and very bioaccumulative</p>
Information added, deleted or revised	Relevant changes compared to the previous version of the safety data sheet are indicated with verticle lines in the left margin.
Version	2