SAFETY DATA SHEET

PRF DESI wipe alcohol

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 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	19.05.2020

1.1. Product identifier

Product name	PRF DESI wipe alcohol
Article no.	PWIDE100A
Extended SDS with ES incorporated	No

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

Use of the substance / preparation	Disinfectant
Main intended use	PP-BIO-2 Disinfectants and algaecides not intended for direct application to humans or animals

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: Myrkytystietokeskus/Finnish Poison Information Center. Open 24 hours a day. 0800 147 111 (the call is free of charge), 09 471 977.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Ethanol 70 %, Propan-2-ol; Isopropyl alcohol; Isopropanol 4 – 5 %
Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P403+P235 Store in a well-ventilated place. Keep cool. P243 Take action to prevent static discharge. P261 Avoid breathing dust / fume / gas / mist / vapours / spray. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Other hazards	Not determined.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5	Flam. Liq. 2; H225	70 %	
Propan-2-ol; Isopropyl alcohol; Isopropanol	CAS No.: 67-63-0 EC No.: 200-661-7	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	4 – 5 %	

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Remove/Take off immediately all contaminated clothing.
Inhalation	If the product has been inhaled, the patient should be transferred to fresh air. If experiencing respiratory symptoms: Call a POISON CENTER or doctor /

	physician.
Skin contact	In case of contact with skin, rinse immediately with plenty of water. Get medical attention if symptoms occur.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a POISON CENTER or doctor/physician.
Ingestion	Do NOT induce vomiting. If swallowed, seek medical advice immediately andshow this container or label.

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

General symptoms and effects	Ingestion of large amounts may cause central nervous system effects (eg dizziness, headache). Contact with undiluted material may cause skin and eye irritation.

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

Medical treatment	For expert advice, a physician should contact the Poison Information Center.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Improper extinguishing media	Do NOT use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Extremely flammable. Explosive reaction may occur on heating or burning.

5.3. Advice for firefighters

Fire fighting procedures	In the event of a fire, wear a self-contained breathing apparatus. In case of fire, coolcontainers with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Eliminate all ignition sources. Pay attention to the spread of gases, especially onthe ground (heavier than air) and in the direction of the wind. Keep people out ofthe spill / leak area and keep people upwind. If significant leaks are not stopped,the local authorities must be notified.
Protective equipment	Wear personal protective equipment including a tightly fitting chemical protectivesuit and compressed air equipment. Wear respiratory protection.

6.2. Environmental precautions

Environmental precautionary measures	Try to prevent the substance from entering drains or watercourses. Inform therelevant authorities if large quantities enter the sewers.

6.3. Methods and material for containment and cleaning up

Clean up	Methods for cleaning up – small spill: Stop leak and collect with non-combustibleabsorbent material (eg sand, earth, diatomaceous earth, vermiculite), transfer toa container for disposal according to local and national regulations (see section 13). Ventilated area. Methods for cleaning up – large spill: Large spills should becollected mechanically (removed by pumping) for disposal.

6.4. Reference to other sections

Other instructions	Not determined.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Keep tightly closed in a dry, cool and well-ventilated place. Avoid inhalation, ingestion and contact with skin and eyes. Provide a suitable fluid recoverysystem to prevent leakage and spillage. It must be ensured that all equipment iselectrically grounded before starting relocation operations. Use explosion-proofequipment. Smoking, eating and drinking should be prohibited in the area of use.Personal protective equipment must be selected according to the type andconcentration of the dangerous substance at the specific workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store at 5 – 25 ° C in a dry, well-ventilated place, away from heat or sources ofignition and direct sunlight. Store away from oxidizing agents and strongly acidicor basic substances. Store in the original package. Keep container tightly closed.

7.3. Specific end use(s)

Specific use(s)	Not determined.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Ethanol	CAS No.: 64-17-5	Limit value (8 h) : 1000 ppm **Limit value (short term)** Value: 1300 ppm Limit value (8 h) : 1900 mg/m3 **Limit value (short term)** Value: 2500 mg/m3	
Propan-2-ol; Isopropyl alcohol; Isopropanol	CAS No.: 67-63-0	Limit value (8 h) : 200 ppm **Limit value (short term)** Value: 250 ppm Limit value (8 h) : 500 mg/m³ **Limit value (short term)**	

	Value: 620 mg/m³

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	Ensure adequate ventilation, especially in confined areas. Use technical methods to comply with workplace air limit values. Wear suitable respiratory equipment if occupational exposure limits are exceeded and / or if the product is released.

Eye / face protection

Required Properties	Tightly fitting safety goggles

Hand protection

Suitable materials	Neoprene, butyl rubber, Viton (R), Nitrile rubber

Respiratory protection

Respiratory protection, general	Normally no personal respiratory protective equipment is required.
Recommended type of equipment	Recommended filter type: A

Appropriate environmental exposure control

Environmental exposure controls	Product residues must be disposed of in accordance with the instructions of theperson responsible for waste management. The product should not be allowed toenter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Cloth impregnated with liquid.
Colour	Colourless
Odour	alcohol-like
Odour limit	Comments: Not determined.
Melting point / melting range	Value: -114 °C Comments: etOH
Boiling point / boiling range	Value: 78,2 °C Comments: etOH
Flash point	Value: ~ 14 °C Comments: etOH
Flammability (solid, gas)	Not determined.
Lower explosion limit with unit of measurement	Value: 3,3 % Comments: etOH
Upper explosion limit with units of measurement	Value: 19 % Comments: etOH
Vapour pressure	Value: 5.85 kPa

	Comments: etOH Temperature: 20 °C
Relative density	Value: ~ 806
Solubility	Medium: Water
Partition coefficient: n-octanol/ water	Value: – 0,31 Comments: etOH
Auto-ignition temperature	Value: 363 – 425 °C Comments: etOH
Decomposition temperature	Comments: Not determined.
Viscosity	Comments: Not determined.
Explosive properties	Not determined.
Oxidising properties	Not determined.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties	Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Keep away from heat and open flame.

10.2. Chemical stability

Stability	Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Keep away from oxidizing agents, strong acids and alkalis to avoid exothermicreactions.

10.4. Conditions to avoid

Conditions to avoid	Heat, flames and sparks.

10.5. Incompatible materials

Materials to avoid	Keep away from oxidizing agents, strong acids and alkalis to avoid exothermicreactions.

10.6. Hazardous decomposition products

Hazardous decomposition products	Not determined.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Comments: etOH: LD50 / dermal / rat = 10470 mg / kg LD50 / dermal / rabbit = 15800 mg / kg LC50 / inhalation / 4h / rat = 51-55 mg / l LC50 / inhalation / 1h / mouse = 30000mg / m3
Other toxicological data	Not classified as acutely toxic.

Other information regarding health hazards

Skin contact	Prolonged or repeated contact may dry out the skin and cause irritation.
Eye contact	Irritating to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	etOH: LC50 / 96t / fish = 11200 mg / l EC50 / 48t / invertebrates, Freshwater = 5012 mg / l EC50 / 48t / invertebrates, seawater = 857 mg / l EC50 / plant / soil = 633 mg / kg

12.2. Persistence and degradability

Persistence and degradability description/evaluation	etOH: Readily biodegradable according to an appropriate OECD test: More than 80% /4 days (OECD TG 301 Biodegradability)

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Bioaccumulation is unlikely.

12.4. Mobility in soil

Mobility	Easily volatile liquid

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not considered to be very persistent and very bioaccumulating(vPvB).

12.6. Other adverse effects

Additional ecological information	Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	The waste must be delivered to an approved waste treatment facility. Product residues must be disposed of in accordance with the instructions of the person

	responsible for waste management.
Appropriate methods of disposal for the contaminated packaging	Completely emptied containers without drops or other residues can be treated asindustrial waste and possibly recycled. Uncleaned empty packaging: Dispose ofas hazardous waste in accordance with local and national regulations.

SECTION 14: Transport information

14.1. UN number

ADR/RID/ADN	1170
IMDG	1170
ICAO/IATA	1170

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ETHANOL SOLUTION
ADR/RID/ADN	ETHANOL SOLUTION
IMDG	ETHANOL SOLUTION
ICAO/IATA	ETHANOL SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN	3
Classificaton code ADR/RID/ADN	F1
IMDG	3
ICAO/IATA	3

14.4. Packing group

ADR/RID/ADN	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

ADR/RID/ADN	II

14.6. Special precautions for user

Special safety precautions for user	Not determined.

14.7. Maritime transport in bulk according to IMO instruments

Pollution category	Z

Additional information

Hazard label ADR/RID/ADN	3

Hazard label IMDG	3
Hazard label ICAO/IATA	3

ADR/RID Other information

Tunnel restriction code	D/E
Transport category	2
Hazard No.	33

IMDG Other information

EmS	F-E, S-D

SECTION 15: Regulatory information

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

Biocides	Yes

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Version	2