SAFETY DATA SHEET PRF Alubright

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	29.04.2015	
Revision date	23.08.2021	
1.1. Product identifier		
Product name	PRF Alubright	
Article no.	PIALUB52	

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

Use of the substance / mixture	Corrosion inhibitor
Main intended use	PC-TEC-OTH Other products for chemical or technical processes

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

	Acute Tox. 4; H312
	Eye Irrit. 2; H319
	Acute Tox. 4; H332
	STOT SE 3; H336
	Aquatic Chronic 1; H410
Additional information on classification	For the full text of the H-statements mentioned in this Section, see Section 16.

2.2. Label elements

Hazard pictograms (CLP)		
Composition on the label	Acetone, Xylene	
Signal word	Danger	
Hazard statements	 H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated. H312 Harmful in contact with skin. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H410 Very toxic to aquatic life with long lasting effects. 	
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. P262 Do not get in eyes, on skin, or on clothing. P410+P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C / 122°F. 	

2.3. Other hazards

PBT / vPvB

See section 12.5

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Acetone	CAS No.: 67-64-1 REACH Reg. No.: 01-2119471330-49-XXXX	Flam. Liq. 2; H225 STOT SE 3; H336 Eye Irrit. 2; H319	15-30 %	
Zinc powder - zinc dust (pyrophoric)	CAS No.: 7440-66-6 EC No.: 231-175-3	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Pyr. Sol. 1; H250	10 - 15 %	

PRF Alubright - Version 2			Page 3 of 15
Xylene	CAS No.: 1330-20-7 EC No.: 215-535-7	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315	5 - 10 %
Substance comments		ants: Propane Butane of the H-statements mentic	ned in this Section see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Take off contaminated clothing and wash it before reuse.	
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.	
Skin contact	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.	
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
Ingestion	Rinse mouth. DO NOT induce vomiting unless directed to do so by a physician or poison control centre. Call a POISON CENTER or doctor/physician if you feel unwell.	

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

General symptoms and effects	Headache Eye irritation Skin irritation Drowsiness Dizziness
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4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Alcohol-resistant foam
Improper extinguishing media	Water spray

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Heating may cause an explosion.
Hazardous combustion products	Carbon dioxide (CO2) Carbon monoxide (CO)

5.3. Advice for firefighters

Personal protective equipment	Protective equipment and precautions for firefighters 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.
Fire fighting procedures	Use water spray to cool unopened containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Eliminate all ignition sources if safe to do so. Evacuate area. Stop leak if safe to do so. Ensure adequate ventilation. Avoid inhalation, ingestion and contact with skin and eyes.
For emergency responders	Use personal protective equipment.

6.2. Environmental precautions

Environmental precautionary	Try to prevent the material from entering drains or water courses. Avoid release
measures	to the environment.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Other instructions	See section 7, 8, 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

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Handling	Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Do not taste or swallow. Wash hands before breaks and immediately after handling the product. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Remove all sources of ignition. Take precautionary measures against static discharges. Non-sparking tools should be used. Use only outdoors or in a well-ventilated area. Use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

	Storage	Remove all sources of ignition. Protect from sunlight. Do not expose to temperatures exceeding 50 °C /122 °F. No smoking. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep only in original container. Do not store together with oxidizing and self-igniting products. Keep away from oxidising agents and strongly acid or alkaline materials. Keep away from food, drink and animal feedingstuffs.
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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
Acetone	CAS No.: 67-64-1	Country of origin: EU Limit value (8 h) : 500 ppm Limit value (8 h) : 1210 mg/ m ³ Recommended monitoring procedures: This information is not available. Source: 2000/39/EC Country of origin: FI Limit value (8 h) : 500 ppm Limit value (8 h) : 1200 mg/ m ³ Limit value (8 h) : 1200 mg/ m ³ Limit value (short term) Value: 630 ppm Limit value (short term) Value: 1500 mg/m ³ Limit value (short term) Value: 1500 mg/m ³ Limit value (short term) Appraisal period: 15 min Recommended monitoring procedures: This information is not available. Source: Decree of the Ministry of Social Affairs and Health on concentrations known to be harmful (654/2020)	
Xylene	CAS No.: 1330-20-7	Country of origin: FI Limit value (8 h) : 50 ppm Limit value (8 h) : 220 mg/ m ³ Limit value (short term) Value: 100 ppm Limit value (short term) Appraisal period: 15 min Limit value (short term) Value: 440 mg/m ³ Limit value (short term) Appraisal period: 15 min Recommended monitoring procedures: This information is not available. Source: Decree of the Ministry of Social Affairs and Health on concentrations known to be harmful (654/2020) Comments: Skin Country of origin: EU Limit value (8 h) : 50 ppm	

Limit value (8 h) : 221 mg/
M ³
Limit value (short term)
Value: 100 ppm
Limit value (short term)
Appraisal period: 15 min
Limit value (short term)
Value: 442 mg/m³
Limit value (short term)
Appraisal period: 15 min
Recommended monitoring
procedures: This
information is not available.
Source: 2000/39/EC
Comments: Skin

DNEL / PNEC

Substance	Acetone
DNEL	Group: Professional Route of exposure: Acute inhalation (local) Value: 2420 mg/m ³
	Group: Professional Route of exposure: Long-term dermal (systemic) Value: 186 mg/kg
	Group: Professional Route of exposure: Long-term inhalation (systemic) Value: 1210 mg/m ³
	Group: Consumer Route of exposure: Long-term dermal (systemic) Value: 62 mg/kg
	Group: Consumer Route of exposure: Long-term inhalation (systemic) Value: 200 mg/m ³
	Group: Consumer Route of exposure: Long-term oral (systemic) Value: 62 mg/kg
PNEC	Route of exposure: Freshwater Value: 10,6 mg/l
	Route of exposure: Saltwater Value: 1,06 mg/l
	Route of exposure: Freshwater sediments Value: 30,4 mg/kg
	Route of exposure: Saltwater sediments Value: 3,04 mg/kg
	Route of exposure: Soil

Value: 29,5 mg/kg

8.2. Exposure controls

Precautionary measures to prevent exposure

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Appropriate engineering controls	See section 7.1, 7,2
Eye / face protection	
Eye protection equipment	Description: Tightly fitting safety goggles Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Reference to relevant standard: EN 166
Hand protection	
Breakthrough time	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, duration of contact). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Hand protection equipment	Description: Protective gloves 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. Reference to relevant standard: EN 374, EN 420
Skin protection	
Recommended protective clothing	Description: 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.
Respiratory protection	
Recommended respiratory protection	Description: Avoid breathing vapours/spray. 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 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: EN 140, EN 141, EN 149, EN 14387
Thermal hazards	

Thermal hazards

Not applicable.

Appropriate environmental exposure control

Environmental exposure controls

Try to prevent the material from entering drains or water courses. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Aerosol dispenser: spray aerosol
Colour	gray
Odour	acetone-like
Odour limit	Reason for waiving data: No data.
рН	Comments: Not applicable.
Melting point / melting range	Value: - 10 °C
Boiling point / boiling range	Value: < - 20 °C
Flash point	Value: < 0 °C
Evaporation rate	Reason for waiving data: No data.
Flammability	Extremely flammable aerosol.
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: No data.
Relative density	Reason for waiving data: No data.
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: No data.
Decomposition temperature	Reason for waiving data: No data.
Viscosity	Reason for waiving data: No data.
Explosive properties	This information is not available.
Oxidising properties	This information is not available.

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	This information is not available.

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 7.2	
10.6. Hazardous decomposition products		

Hazardous decomposition See section 5.2 products

SECTION 11: Toxicological information

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

Substance	Acetone
Acute toxicity	Effect tested: LD50 Route of exposure: Oral Method: OECD 401 Value: 5800 mg/kg Animal test species: Rat Effect tested: LC50 Route of exposure: Inhalation. Duration: 4 hour(s) Value: 76 mg/l Animal test species: Rat Effect tested: LD50 Route of exposure: Dermal Value: > 15800 mg/kg Animal test species: Rabbit
Substance	Xylene
Acute toxicity	Effect tested: LC50 Route of exposure: Inhalation (vapour) Method: 67/548/ETY, V, B.2. Duration: 4 hour(s) Value: 27,6 mg/l Animal test species: Rat Effect tested: LD50 Route of exposure: Oral

Method: 67/548/ETY, V, B.1. Value: 3523 mg/kg Animal test species: Rat
Effect tested: LD50
Route of exposure: Dermal
Value: > 4200 mg/kg
Animal test species: Rabbit

Other information regarding health hazards

Assessment of acute toxicity, classification	Harmful in contact with skin. Harmful if inhaled.
Assessment of skin corrosion / irritation, classification	Based on available data, the classification criteria are not met.
Substance	Acetone
Eye damage or irritation, test results	Species: Rabbit Evaluation result: irritating
Assessment of eye damage or irritation, classification	Causes serious eye irritation.
Substance	Acetone
Respiratory or skin sensitisation	Species: Guinea pig Evaluation result: Does not cause skin sensitization. Does not cause respiratory sensitization.
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	May cause drowsiness or dizziness.
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	Acetone
Aquatic toxicity, fish	Toxicity type: Acute Value: 5540 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Oncorhynchus mykiss
	Toxicity type: Acute Value: 11000 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Alburnus alburnus
Substance	Xylene
Aquatic toxicity, fish	Value: 2,6 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Oncorhynchus mykiss
	Value: 26,7 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Pimephales promelas
	Value: 780 mg/l Effect dose concentration: LC50 Test duration: 96 hour(s) Species: Cyprinus carpio
Substance	Acetone
Aquatic toxicity, algae	Toxicity type: Acute Value: 430 mg/l Effect dose concentration: NOEC Test duration: 96 hour(s)
Substance	Xylene
Aquatic toxicity, algae	Value: 4,36 mg/l Effect dose concentration: EC50 Test duration: 73 hour(s) Species: Pseudokirchneriella subcapitata Method: OECD TG 201
	Value: 10 mg/l Effect dose concentration: EC50

	Test duration: 72 hour(s) Species: Skeletonema costatum
Substance	Acetone
Aquatic toxicity, crustacean	Toxicity type: Acute Value: 8800 mg/l Effect dose concentration: LC50 Test duration: 48 hour(s) Species: Daphnia magna Toxicity type: Chronic Value: 2212 mg/l Test duration: 8 day(s)
_	Species: Daphnia magna
Substance	Xylene
Aquatic toxicity, crustacean	Value: 1 mg/l Effect dose concentration: IC50 Test duration: 24 hour(s) Species: Daphnia magna Method: OECD TG 202

12.2. Persistence and degradability

Substance	Acetone
Biodegradability	Value: 84 % Comments: Readily biodegradable Test period: 20 day(s) Value: 91 % Method: OECD 301 B Test period: 28 day(s)
Substance	Xylene
Biodegradability	Value: 87,8 % Method: OECD TG 301 F Comments: Readily biodegradable Test period: 28 day(s)

12.3. Bioaccumulative potential

Substance	Acetone
Bioconcentration factor (BCF)	Value: < 10 Comments: Does not bioaccumulate.
Substance	Xylene
Bioconcentration factor (BCF)	Value: 7,2 - 25,9 Animal test species: Oncorhynchus mykis Comments: 56 d

12.4. Mobility in soil

Mobility

This information is not available.

12.5. Results of PBT and vPvB assessment

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

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 for the chemical	s of disposal	Dispose of in accordance with local regulations. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal. Try to prevent the material from entering drains or water courses.
Appropriate methods for the contaminated		Dispose of contents/container in accordance with local regulation. Empty containers should be taken to an approved waste handling site for recycling or 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
Classificaton code ADR/RID/ADN	5F
Comments	2.1 (D)

14.4. Packing group

14.5. Environmental hazards

Comments

Toxic to aquatic life with long lasting effects.

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
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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	1L
Excepted quantity	EO
Special provisions	190 327 344 625
Transport category	2

ADN Other information

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

IMDG Other information

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

ICAO/IATA Other information

Limited quantity	30 kg
Excepted quantity	EO
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 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	No
performed	

SECTION 16: Other information	
List of relevant H-phrases (Section 2 and 3)	 H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: May burst if heated. H250 Catches fire spontaneously if exposed to air. 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. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
CLP classification, notes	Calculation method.
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. <u>http://echa.europa.eu</u> <u>http://eur-lex.europa.eu</u>
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
Comments	The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.