SAFETY DATA SHEET

PRF Heavyzink

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

1.1. Product identifier

Trade name

PRF Heavyzink

Unique formula identifier (UFI)

F33Y-48F7-4004-6J08

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

Relevant identified uses of the substance or mixture

Industrial purposes

EuPCS

PC-PNT-1 / Aerosol paints and coatings

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Taerosol Oy
Hampuntie 21
36220 Kangasala
Finland
+358 033565600
http://www.taerosol.com

E-mail

tilaukset@taerosol.com

Revision

01/10/2024

SDS Version

5.0

Date of previous version

30/09/2024 (4.0)

1.4. Emergency telephone number

HUS Poison Information Center, 24h 0800 147 111
Poison Information Center / HUS, Tukholmankatu 17, 00029 HUS (Helsinki)
See first aid measures section 4.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.
Eye Irrit. 2; H319, Causes serious eye irritation.
STOT SE 3; H336, May cause drowsiness or dizziness.
Aquatic Acute 1; H400, Very toxic to aquatic life.
Aquatic Chronic 1; H410, Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)
Causes serious eye irritation. (H319)
May cause drowsiness or dizziness. (H336)

Very toxic to aquatic life with long lasting effects. (H410)

Precautionary statement(s)

General

Keep out of reach of children. (P102)

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
Do not spray on an open flame or other ignition source. (P211)
Do not pierce or burn, even after use. (P251)

Response

-

Storage

Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F. (P410+P412)

Disposal

Dispose of contents/container in accordance with local regulation
(P501)

Hazardous substances

Acetone
n-butyl acetate

Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.

UFI: F33Y-48F7-4004-6J08

2.3. Other hazards

Additional warnings

In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive.
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Acetone	CAS No.: 67-64-1 EC No.: 200-662-2 REACH: 01-2119471330-49- Index No.: 606-001-00-8	20 - 50%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
zinc powder - zinc dust (unstabilised)	CAS No.: 7440-66-6 EC No.: 231-175-3 REACH: 01-2119467174-37- Index No.: 030-001-00-1	20 - 50%	Pyr. Sol. 1, H250 Water-react. 1, H260 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[20]
n-butyl acetate	CAS No.: 123-86-4 EC No.: 204-658-1 REACH: 01-2119485493-29- Index No.: 607-025-00-1	< 10%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	[1]
p-xylene	CAS No.: 106-42-3 EC No.: 203-396-5 REACH: 01-2119484661-33- Index No.: 601-022-00-9	< 2,5%	Flam. Liq. 3, H226 Acute Tox. 4, H312 Skin Irrit. 2, H315 Acute Tox. 4, H332	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.
[20] The physical hazards of the substance will not be taken into account as this substance is marketed in a form, which does not have the physical hazards indicated by the classification in the entry in Part 3 of the CLP Regulation

(Annex VI, note T).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.
In use may form flammable/explosive vapour-air mixture.
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Information Center on: 09-471977, in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.
Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Always store in containers of the same material as the original container.

Storage conditions

< 50°C

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetone
Long term exposure limit (8 hours) (ppm): 500
Long term exposure limit (8 hours) (mg/m^3): 1200
Short term exposure limit (15 minutes) (ppm): 630
Short term exposure limit (15 minutes) (mg/m^3): 1500

Regulation of the Ministry of Social Affairs and Health on concentrations of chemical substances found to be harmful (654/2020).

DNEL

Acetone

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	186 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	1210 mg/m^3
Short term – Local effects - Workers	Inhalation	2420 mg/m^3

PNEC

Acetone

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10.6 mg/L
Freshwater sediment		30.4 mg/kg
Marine water		1.06 mg/L

Marine water sediment	3.04 mg/kg
Soil	29.5 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Provide adequate general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation.				
Combination filter AXP2		Brown/White	EN14387, EN143	

Skin protection

Recommended	Type/Category	Standards
No special when used as intended.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Laminate	-	> 480	EN374-2, EN374-3, EN388	

Eye protection

Type	Standards	
Safety glasses	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Aerosol

Colour

Gray

Odour / Odour threshold

Characteristic

pH

Not applicable - pH is not defined for non-aqueous systems

Density (g/cm³)
Not applicable - product is an aerosol
Relative density
Not applicable - product is an aerosol
Kinematic viscosity
Not applicable - product is an aerosol
Particle characteristics
Not applicable - product is an aerosol

Phase changes
Melting point/Freezing point (°C)
No data available
Softening point/range (°C)
Does not apply to aerosols.
Boiling point (°C)
No data available
Vapour pressure
No data available
Relative vapour density
Not applicable - product is an aerosol
Decomposition temperature (°C)
No data available

Data on fire and explosion hazards
Flash point (°C)
< 0
Flammability (°C)
The material is ignitable.
Auto-ignition temperature (°C)
Not applicable - product is an aerosol
Lower and upper explosion limit (% v/v)
No data available

Solubility
Solubility in water
No data available
n-octanol/water coefficient (LogKow)
No data available
Solubility in fat (g/L)
No data available

9.2. Other information
Other physical and chemical parameters
No data available.
Oxidizing properties
No relevant or available data due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.
10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.
10.3. Possibility of hazardous reactions
None known.
10.4. Conditions to avoid
Avoid static electricity.
Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.
10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Acetone
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5800 mg/kg

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.
Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.
This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)
HP 14 – Ecotoxic
Dispose of contents/container to an approved waste disposal plant.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	Yes	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	Yes	Limited quantities: 1 L EmS: F-D S-U See below for additional information.
IATA	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F 	-	Yes	See below for additional information.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.
ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user
Not applicable.

14.7. Maritime transport in bulk according to IMO instruments
No data available.

SECTION 15: Regulatory information

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

Restrictions for application
People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education
No specific requirements.

SEVESO - Categories / dangerous substances
P3b - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 5.000 tonnes (net) / (upper-tier): 50.000 tonnes (net)
E1 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 100 tonnes / (upper-tier): 200 tonnes

Regulation on drug precursors
Acetone is included (Category 3)

Regulation on explosives precursors
Acetone (Annex II)

REACH, Annex XVII
Acetone is subject to REACH restrictions (entry 40).
zinc powder - zinc dust (unstabilised) is subject to REACH restrictions (entry 40).
n-butyl acetate is subject to REACH restrictions (entry 40).
p-xylene is subject to REACH restrictions (entry 40).

Additional information
Not applicable.

Sources
Decree of the Government on the protection of pregnant, recently given birth and breastfeeding workers from factors that cause danger at work (143/2024)

Law for compliance of aerosols 13.11.2020/794
Government Decree 686/2015 amending the Government Decree on Safety Requirements for the Industrial Handling and Storage of Dangerous Chemicals.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Council Regulation (EC) No 273/2004 on drug precursors.
Council Regulation (EC) No 2019/1148 on explosives precursors.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment
No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3
EUH066, Repeated exposure may cause skin dryness or cracking.
H225, Highly flammable liquid and vapour.
H226, Flammable liquid and vapour.
H250, Catches fire spontaneously if exposed to air.
H260, In contact with water releases flammable gases which may ignite spontaneously.
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.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP). The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP). The classification of the mixture in regard to physical hazards has been based on the flammability classification procedure given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Taerosol Oy

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: FI-en