Safety Data Sheet

Aqueous DPC Injection Fluid Concentrate

1. Identification of Substance / Preparation and Company.

1.1 Product Identifier
Commercial Product Name: Aqueous DPC Injection Fluid Concentrate

1.2 Relevant identified uses of the substance or mixture and uses advised against
Industrial.
Waterproofing agent for: Building materials

1.3 Details of the supplier of the data sheet
Company: Permagard Products Limited
Chittening Industrial Estate
Avonmouth
Bristol
BS11 0YB

1.4
Telephone: **+44 117 9381596**
Fax: **+44 117 9381584**
Web: **www.permagard.co.uk**

2. Hazard Identification

2.1 Classification of the substance or mixture
Classification (67/548/EEC, 199/45EC):

R-Phrase	Description
R35	Causes severe burns

2.2 Label Elements:
Labelling (67/548/EEC, 199/45EC):

	C	Corrosive

Risk phrases: R35: Causes severe burns.
Safety phrases: S23: Do not breathe spray.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S51: Use only in well-ventilated areas.

Hazard ingredients (labelling EC):
Potassium methylsiliconate

2.3 Other hazards:
No data available

3. Composition / Information on Ingredients.

3.1 Substances
Not applicable

3.2 Mixtures

3.2.1 Chemical characterisation (preparation)
Potassium silicontate + water

3.2.2 Hazardous ingredients

EC-No	CAS No	Material	Content %	Warning Label (EC)	
				Symbol	R-Phrases*
250-807-9	31795-24-1	Potassium methylsiliconate	>50%	C	R35

*Classification codes are explained in section 16.

4. First Aid Measures.

4.1 Description of first aid measures
General information:
Take persons to a safe place. Observe self-protection for first aid. Always seek medical advice in the event of contact with this substance.
After inhalation:
Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice immediately and clearly identify substance.
After contact with the skin:
Remove contaminated clothes at once. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious
cases, use emergency shower immediately. Seek medical advice immediately and clearly identify substance.
After contact with the eyes:
Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.
After swallowing:
If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice immediately and clearly identify substance.

4.2 Most important symptoms and effects, both acute and delayed
Any relevant information can be found in other parts of this section.

4.3 Indication of any immediate medical attention and special treatment needed
After inhalation: treat as early as possible using cortisone spray. Medical checks necessary up to a latency period of at least 24 hours. In the event of 1st degree burns use corticoid-externa. In the case of 2nd degree burns, use symptomatic treatment.

5. Fire Fighting Measures.

5.1 Extinguishing media
Suitable extinguishing media:
not applicable
Extinguishing media which must not be used for safety reasons:
not applicable

5.2 Special hazards arising from the substance or mixture
not applicable

5.3 Advice for firefighters
Special protective equipment for fire fighting:
Use respiratory protection independent of recirculated air.
General information:
Product does not burn. Use extinguishing measures appropriate to the source of the fire.

6. Accidental Release Measures.

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. Keep unprotected persons away.

6.2 Environmental precautions
Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth).

6.3 Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Dilute with plenty of water and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers.

6.4 Reference to other sections

Relevant information in other sections have to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

7. Handling and Storage.

7.1 Precautions for safe handling

Precautions for safe handling:

Avoid contact with acids. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection).

Precautions against fire and explosion:

No special precautions against fire and explosion required.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Do not store in containers made of aluminum or other light metals.

Advice for storage of incompatible materials:

Avoid contact with acids.

Further information for storage:

Keep container tightly closed.

7.3 Specific end use(s)

No data are available.

8. Exposure Controls / Personal Protection.

8.1 Control parameters

-

8.2 Exposure controls

8.2.1 Exposure in the work place limited and controlled

General protection and hygiene measures:

Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. Do not eat or drink when handling. Remove contaminated, soaked clothing immediately.

Personal protection equipment:

Respiratory protection

In case of long or strong exposure: gas mask filter ABEK .

Hand protection

Gloves are required at all times when handling the material. Recommendation: Protective gloves made of 5-layer laminate of PE and EVOH (4H) , protective gloves coated with neoprene , nitrile rubber protective gloves or protective gloves made of fluorinated rubber . Gloves suitable for up to 480 minutes' use.

Eye protection

Tight fitting protective goggles required . Provide work station with eye bathing equipment. Do not wear contact lenses.

Skin protection

Protective clothing, protective goggles/face protection . Where there is risk of splashing: complete head, face and neck protection .

8.2.2 Exposure to the environment limited and controlled

Prevent material from entering surface waters and soil. Do not introduce large amounts into purification plants. Normally neutralisation is required before waste water is introduced into purification plants.

8.3 Further information for system design and engineering measures

Observe information in section 7.

9. Physical and Chemical Properties.

9.1 Information on basic physical and chemical properties

General information:

Physical state / form.....: liquid
Colour .....: colourless to yellowish
Odour .....: slight

Important information about the protection of health, safety and the environment:

Property: Value: Method:
Melting point / melting range .....: approx. -85 °C
Boiling point / boiling range .....: 100 °C at 1013 hPa
Crystal formation .....: -84,8 °C at 1013 hPa
Setting point/range .....: < -80 °C at 1013 hPa
Flash point.....: not applicable (ISO 3679)
Ignition temperature .....: > 600 °C (DIN 51794)
Lower explosion limit (LEL) .....: not applicable
Upper explosion limit (UEL).....: not applicable
Vapour pressure.....: not determined
Density .....: 1,4 g/cm³ at 25 °C, at 1013 hPa
Water solubility / miscibility.....: completely miscible at 20 °C
pH-Value .....: 13 - 14 at 20 °C
Viscosity (dynamic) .....: 10 - 25 mPa.s at 25 °C

9.2 Other information
No data are available.

10. Stability and Reactivity.

10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions
If stored and handled in accordance with standard industrial practices no hazardous reactions are known. Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid
none known

10.5 Incompatible materials
Reacts with: acids . Reaction causes the formation of: heat.

10.6 Hazardous decomposition products
If stored and handled properly: none known.

11. Toxicological Information.

11.1 Information on toxicological effects

11.1.1 Acute toxicity
Assessment:
Based on the available data acute toxic effects are not expected after single oral exposure.
Product details:

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD50: > 2000 mg/kg	rat	test report

11.1.2 Skin corrosion/irritation
Assessment:
After contact to the skin strong corrosion of the skin are to be expected.
Product details:

Result/Effect	Species/Test system	Source
severe burns	rabbit	weight of evidence

11.1.3 Serious eye damage / eye irritation
Assessment:
After contact to the eyes irreversible effects must be expected.
Product details:

Result/Effect	Species/Test system	Source
severe burns	rabbit	weight of evidence

11.1.4 Respiratory or skin sensitization
Assessment:
Based on the corrosive properties an examination of this toxicological endpoint is not necessary

11.1.5 Germ cell mutagenicity
Assessment:
Evaluation on the basis of the whole data, including results of similar substances: According to our present state of knowledge not mutagenic.

Product details:

Result/Effect	Species/Test system	Source
negative	mutation assay (in vitro) bacterial cells	test report OECD 471
positive	chromosome aberreation assay (in vitro) mammalian cells	test report (Alkoxy silanes) OECD 473
negative	micro nucleus assay (in vivo)	test report (Alkoxy silanes) OECD 474

11.1.6 Carcinogenicity

Assessment:

Based on the available toxicological data no specific evaluation of the carcinogenic potential is scientifically implicated.

11.1.7 Reproductive toxicity

Assessment:

Based on hydrolysis characteristics of the substance the assessment is based on the hydrolysis products. For the silanols/siloxanols a conclusion was made by analogy (read-across) to structurally similar alkoxy silanes. On the basis of the available data no reproductive hazards are expected.

Product details:

Result/Effect (Examinations of fertility disruption)	Species/Test system	Source
NOAEL: >= 1000 mg/kg	rat	test report (Alkoxy silanes) OECD 422

Result/Effect (Examinations of developmental toxicity and teratogenicity)	Species/Test system	Source
NOAEL (developmental): >= 1000 mg/kg	rat	test report (Alkoxy silanes) OECD 422

11.1.8 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (repeated exposure)

Assessment:

Systemic effect(s): Based on hydrolysis characteristics of the substance the assessment is based on the hydrolysis products. For the silanols/siloxanols a conclusion was made by analogy (read-across) to structurally similar alkoxy silanes.

Product details:

Result/Effect	Species/Test system	Source
NOAEL: 50 mg/kg	rat	test report (Alkoxy silanes) OECD 422
NOAEC: 0,557 mg/l	rat	test report (Alkoxy silanes) OECD 413

11.1.10 Aspiration hazard

Assessment:

In case an aspiration hazard is based on ingredients, this can be seen from the classification and labeling of the whole product.

12. Ecological Information.

12.1 Toxicity

Assessment:

Based on hydrolysis characteristics of the substance the assessment is based on the hydrolysis products. For the silanols/siloxanols a conclusion was made by analogy (read-across) to structurally similar alkoxy silanes. Alkoxysilane: : No expected damaging effects to aquatic organisms. Harmful effect through pH-shift possible. On the basis of these data no harmful effects are expected for aquatic organisms after neutralization or if the buffer capacity of the sewage treatment plant or the water compartment is not exeeded.

Product details:

Result/Effect	Species/Test system	Source
LC50: > 500 mg/l	Semistatic zebra fish (Brachydanio rerio) (96 h)	test report (Alkoxysilanes) OECD 203
EC50: > 100 mg/l	Static Daphnia magna (48 h)	test report OECD 202
EC50: > 120 mg/l	Static Pseudokirchneriella subcapitata (72 h)	test report (Alkoxy silanes) OECD 201
EC50: > 100 mg/l	no data available	test report OECD 209

12.2 Persistence and degradability

Assessment:
Biologically not degradable.
Product details:
Biodegradation:

Result	Test system/Method	Source
0 % / 28 d Not readily biodegradable.	CO2 formation	test report (Alkoxy silanes) OECD 310

12.3 Bioaccumulative potential

Assessment:
No adverse effects expected.

12.4 Mobility in soil

Assessment:
No data known.

12.5 Other adverse effects

none known

13. Disposal Considerations.

13.1 Waste treatment methods

13.1.1 Material

Recommendation:
Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.

13.1.2 Uncleaned packaging

Recommendation:
Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14. Transport Information.

14.1–14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group

Road ADR:
Valuation .....: Hazardous product
14.1 UN no. .....: 3267
14.2 Proper Shipping Name.....: Potassium methylsiliconate
14.3 Class .....: 8
14.4 Packaging Group .....: II

Railway RID:
Valuation .....: Hazardous product
14.1 UN no. .....: 3267
14.2 Proper Shipping Name.....: Potassium methylsiliconate
14.3 Class .....: 8
14.4 Packaging Group .....: II

Transport by sea IMDG-Code:
Valuation .....: Hazardous product
14.1 UN no. .....: 3267
14.2 Proper Shipping Name.....: Corrosive liquid, basic, organic, n.o.s..
(Contains potassium methylsiliconate)
14.3 Class .....: 8
14.4 Packaging Group .....: II

Air transport ICAO-TI/IATA-DGR:
Valuation .....: Hazardous product
14.1 UN no. .....: 3267
14.2 Proper Shipping Name.....: Corrosive liquid, basic, organic, n.o.s..
(Contains potassium methylsiliconate)
14.3 Class .....: 8
14.4 Packaging Group .....: II

14.5 Environmental hazards
Hazardous to the environment: no
Marine Pollutant (IMDG): no

14.6 Special precautions for user
Relevant information in other sections have to be considered.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Bulk transport in tankers is not intended.

15. Regulatory Information.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
National and local regulations must be observed.
For information on labelling please refer to section 2 of this document.

15.2 Other international regulations
Details of international registration status:
Listed on or in accordance with the following inventories:
EINECS - Europe
AICS - Australia
DSL - Canada
ECL - Korea
ENCS - Japan
PICCS - Philippines
TSCA - USA
IECSC - China
REACH registration number: 01-2119517439-34-0000

16. Other Information.

Legal Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.