

SAFETY DATA SHEET

VIAFORM LIQUID

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

1.1. Product identifier

Trade name: VIAFORM LIQUID
Product no.: PZ22189A 1000 I IBC, PZ2219TA 25 l cannister.
Unique formula identifier (UFI): 4WGA-4V33-N20M-EV25

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

Relevant identified uses of the substance or mixture: De-icing, De-icing agent for use on roads and open areas in winter maintenance. Restricted to professional users.

Use descriptors (UK REACH):

Sectors of use	Description
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	Description
PC 4	Anti-Freeze and De-icing products
Process category	Description
PROC 3	Use in closed batch PROC ess (synthesis or formulation)
PROC 5	Mixing or blending in batch PROC esses for formulation of preparations and articles (multistage and/or significant contact)
PROC 7	Industrial spraying
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC 9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC 11	Non industrial spraying
PROC 15	Use as laboratory reagent
Environmental release category	Description
ERC 4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC 8a	Wide dispersive indoor use of processing aids in open systems
ERC 8d	Wide dispersive outdoor use of processing aids in open systems

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address: **ADDICON Nordic AS**
Herøya Industrial park B-85, Hydrovegen 55, Postboks 1138, 3905 Porsgrunn
3936 Porsgrunn
Norway
+47 35 56 41 00
www.addcon.com
Contact person: HESQ ADDICON Nordic AS, Øyvind O. Due: +47 35 56 41 37/ mob +47 48 26 91 48
E-mail: oyvind.oskarsen.due@addcon.com
Revision: 03/03/2025

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

SDS Version: 5.0

1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)
General public:
England - Dial 111 to reach NHS 111 (24 hour service)
Scotland - Dial 112 to reach NHS 24 (24 hour service)
Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)
See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

2.2. Label elements

Hazard pictogram(s): Not applicable.
Signal word: Not applicable.
Hazard statement(s): Not applicable.
Precautionary statement(s):
General: -
Prevention: Wear protective gloves/protective clothing/eye protection/face protection. (P280)
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Storage: -
Disposal: -
Hazardous substances: None known.
Additional labelling: Not applicable.
The product is classified based on test data.

2.3. Other hazards

Additional warnings: 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
Potassium formate	CAS No.: 590-29-4 EC No.: 209-677-9 UK-REACH: Index No.:	~ 50 %		

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

Other information

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SECTION 4: First aid measures

4.1. Description of first aid measures

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

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:	In case of discomfort: bring the person into fresh air.
Skin contact:	Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.
Eye contact:	Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.
Ingestion:	Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.
Burns:	Not applicable.

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

May cause skin irritation in the form of redness and/or itching with prolonged and repeated contact.
May irritate eyes upon direct contact.

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

Treat symptomatically.

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

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.
Formation of hydrogen can lead to a risk of explosion.
In case of fire/heating, the water may evaporate. The dry matter consists of potassium formate which, when heated to above 300 °C, will decompose into hydrogen and potassium oxalate.

5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

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

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

Recommended storage material: Keep only in original packaging.

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Storage conditions: No special storage requirements

Incompatible materials: Strong oxidizing agents
Strong acids
Avoid contact with highly oxidizing materials such as nitric acid, hydrogen peroxide and sulfuric acid.

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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

Potassium formate

Duration:	Route of exposure:	DNEL:
	Dermal	20,6 mg/cm ²
Short term – Systemic effects - General population	Dermal	107,4 mg/kg bw/dag
Short term – Systemic effects - General population	Dermal	3088 mg/kg bw pr dag
Short term – Systemic effects - Workers	Dermal	6175 mg/kg bw/dag
Short term – Systemic effects - Workers	Inhalation	435 mg/m ³
Long term – Systemic effects - General population	Oral	30,9 mg/kg bw/dag

PNEC

No data available.

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

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: Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures: Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures: Wash hands after use.

Measures to avoid environmental exposure: No specific requirements.

Individual protection measures, such as personal protective equipment

Generally: Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards
Respiratory protection is not needed in the event of adequate ventilation.			

Skin protection:

Recommended	Type/Category	Standards
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-



Hand protection:

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,56	> 480	EN374-2, EN374-3, EN388	
Vinyl/PVC	0,5	> 480	EN374-3, EN388, EN511	

Eye protection:

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Safety glasses	EN ISO 16321-1	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour / Odour threshold:	No data available.
pH:	-
pH in solution:	< 11.5 (%)
Density (g/cm ³):	1,33 - 1,37
Kinematic viscosity:	3.2 cP
Particle characteristics:	Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C):	No data available.
Softening point/range (°C):	Does not apply to liquids.
Boiling point (°C):	116 °C
Vapour pressure:	20 mmHg (20 °C)
Relative vapour density:	No data available.
Decomposition temperature (°C):	No data available.

Data on fire and explosion hazards

Flash point (°C):	> 100 °C
Flammability (°C):	No data available.
Auto-ignition temperature (°C):	No data available.
Lower and upper explosion limit (% v/v):	No data available.

Solubility

Solubility in water:	Completely soluble (> 1000 g/l)
n-octanol/water coefficient (LogKow):	No data available.
Solubility in fat (g/L):	No data available.

9.2. Other information

Surface tension (mN/m) @20 °C:	72
Oxidizing properties:	No data available.

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Other physical and chemical parameters: No data available.

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**
None known.
- 10.5. Incompatible materials**
Strong oxidizing agents
Strong acids
Avoid contact with highly oxidizing materials such as nitric acid, hydrogen peroxide and sulfuric acid.
- 10.6. Hazardous decomposition products**
Under normal conditions of storage and use, hazardous decomposition products should not be produced.
In case of fire/heating, the water may evaporate. The dry matter consists of potassium formate which, when heated to above 300 °C, will decompose into hydrogen and potassium oxalate.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Potassium formate
Test method:	OECD 402
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	> 2000 mg/kg bw

Product/substance	Potassium formate
Test method:	OECD 401
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5500 mg/kg bw

Product/substance	Potassium formate
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	> 0,67 mg/l

Skin corrosion/irritation

Product/substance	Potassium formate
Test method:	OECD 404
Result:	No adverse effect observed (Not irritating)

Serious eye damage/irritation

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

Respiratory sensitisation

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

Skin sensitisation

Product/substance	Potassium formate
Test method:	OECD 406
Species:	Guinea pig
Result:	No adverse effect observed (not sensitising)

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

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

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

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

None known.

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

Product/substance	Potassium formate
Test method:	OECD 203
Species:	Fish, Oncorhynchus mykiss
Result:	3500 mg/l
Product/substance	Potassium formate
Test method:	ISO 10253 (Water quality - Marin
Species:	Algae, Skeletonema costatum
Duration:	72 hours
Result:	3700 mg/l
Product/substance	Potassium formate
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Result:	> 1000 mg/l
Product/substance	Potassium formate
Test method:	OECD 202
Species:	Crustacean, Daphnia magna
Duration:	48 hours
Test:	EC50
Result:	540 mg/L

12.2. Persistence and degradability

Product/substance	VIAFORM LIQUID
Conclusion:	Readily biodegradable
Product/substance	Potassium formate
Duration:	28 days
Result:	= 92
Conclusion:	Readily biodegradable
Test:	OECD 301 D
Product/substance	Potassium formate
Result:	>90 % (28 d)
Conclusion:	-

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

12.3. Bioaccumulative potential

Product/substance: VIAFORM LIQUID
Conclusion: Bioaccumulation is not expected

12.4. Mobility in soil

Soluble in water

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

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
The product is not classified as dangerous, but should nevertheless be handled with caution and not flushed into drains, water reservoirs or disposed of in the wild. If significant amounts are released into the water, there may be a local increase in pH.

EWC code

Not applicable.

Specific labelling

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	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

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: Restricted to professional users.

Demands for specific education: No specific requirements.

Control of Major Accident Hazards (COMAH) -

Categories / dangerous substances:

Additional information: Not applicable.

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

Sources: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment
No

SECTION 16: Other information

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC 3 = Use in closed batch PROC ess (synthesis or formulation)
PROC 5 = Mixing or blending in batch PROC esses for formulation of preparations and articles (multistage and/or significant contact)
PROC 7 = Industrial spraying
PROC 8a = Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC 8b = Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC 9 = Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC 11 = Non industrial spraying
PROC 15 = Use as laboratory reagent
PC 4 = Anti-Freeze and De-icing products
ERC 4 = Industrial use of processing aids in processes and products, not becoming part of articles
ERC 8a = Wide dispersive indoor use of processing aids in open systems
ERC 8d = Wide dispersive outdoor use of processing aids in open systems

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

According to REACH Regulation (EC) No 1907/2006, as retained and amended by SI 2019/758 and SI 2020/1577

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

In accordance with UK-REACH, a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information as required by UK-REACH.

The safety data sheet is validated by

Safety Data Sheet Consulting AS

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: GB-en