

1 Identification

- **Product identifier**
- **Product name:** **Potassium Formate 75%**
- **Product identifier** Potassium Formate 75%
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture**
 - Drilling and completion fluids
 - Deicing agent
 - Heat transfer fluid
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Bare Ground**
 - PO Box 3477**
 - Framingham, MA 01705**
 - 888-800-8356 (F): 978-439-9868**
 - www.perstorp.com
 - Perstorp Oxo Belgium AB
 - Durmakker 33
 - Havennummer 8768A
 - B-9940 Evergem
 - Belgium
 - Tel. +32 9 2571717 Fax +32 9 2532678 www.perstorp.com
- **Information department:** productinfo@perstorp.com
- **Emergency telephone number:** 1 866 519 4752 (Contract No. : 334101)

2 Hazard(s) identification

- **Classification of the substance or mixture**

The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **Hazard pictograms** Not applicable
- **Signal word** Not applicable
- **Hazard statements** Not applicable
- **Precautionary statements** Not applicable
- **Hazard description:** No special hazards are associated with this product.

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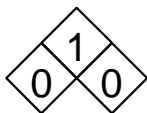
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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 1
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	1
REACTIVITY	0

Health = 0
Fire = 1
Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** No.
- **vPvB:** No.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures** Yes.

- **Chemical components:**

590-29-4	potassium formate	60-75%
7732-18-5	water	25-40%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** First aid measures not required, but get fresh air for personal comfort.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
Rinse mouth with water.
If a large quantity has been ingested or you feel unwell, get medical advice/attention.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Water
Foam
Carbon dioxide
Fire-extinguishing powder
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.

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- **Advice for firefighters**
- **Protective equipment:**
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear safety glasses, gloves, protective clothing and rubber boots.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Small spill:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Large spill:
Pump up the product into a spare container suitably labelled.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling**
Wear personal protective equipment according to section 8 if risk of exposure.
Keep away from heat and direct sunlight.
- **Information about protection against explosions and fires:** Not applicable
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**

S Protective gloves

- **Material of gloves**
Nitrile rubber, NBR
Chloroprene rubber, CR
Butyl rubber, BR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**

R Safety glasses

- **Body protection:** Normal work clothes for the chemical industry (long legs and sleeves).
- **Limitation and supervision of exposure into the environment** Not applicable

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Faint

· pH-value at 20 °C (68 °F): 8.5-11.0

· Change in condition

Melting point/Melting range:	-10-0 °C (14-32 °F)
Boiling point/Boiling range:	105-115 °C (221-239 °F)

· Flash point: > 190 °C (> 374 °F) (ASTM D 7094-04)

· Flammability (solid, gaseous): The product is not flammable.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Not explosive.

· Explosion limits: Not applicable

· Oxidizing properties: Not oxidizing.

· Vapor pressure: Not applicable

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- | | |
|---|--|
| · Density at 20 °C (68 °F): | 1570 kg/m ³ |
| · Solubility in / Miscibility with Water at 20 °C (68 °F): | >1000 g/l |
| · Segregation coefficient (n-octanol/water): | <0 log POW |
| · Viscosity: | |
| Dynamic: | Not applicable |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- Reactivity**
There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.
- Chemical stability** The product is stable at normal conditions.
- Possibility of hazardous reactions** Reacts with strong acids and oxidizing agents.
- Conditions to avoid** None known.
- Incompatible materials:** Avoid contact with acids.

11 Toxicological information

- Information on toxicological effects**
- Acute toxicity:**

- LD/LC50 values:**

590-29-4 potassium formate

Oral	LD50	5500 mg/kg (mouse)
Dermal	LD50	>2000 mg/kg (rat) (similar substance, sodium formate, OECD 402)

- Primary irritant effect:**
- on the skin:** Slightly irritating.
- on the eye:** Slightly irritating.
- Sensitization** No sensitizing effects known.
- Carcinogenicity:** No information available.
- Mutagenicity:** No information available.
- Reproductive toxicity:** No information available.

12 Ecological information

- Toxicity**

- Aquatic toxicity:**

590-29-4 potassium formate

EC50/72h	>1000 mg/l (algae) (OECD 201)
	>1000 mg/l (Selenastrum capricornutum) ((sodium formate))
LC50/48h	>1000 mg/l (Daphnia magna) ((sodium formate))
	540 mg/l (daphnia) (OECD 202)
LC50/96h	>1000 mg/l (Oncorhynchus mykiss) ((sodium formate))

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NOEC	3500 mg/l (fish) (OECD 203)
	>1000 mg/l (Oncorhynchus mykiss) ((sodium formate))

· **Persistence and degradability**

The product is readily biodegradable.

590-29-4 potassium formate

BOD28	92 % (bacteria) (OECD 301D)
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· **Bioaccumulative potential**

Low potential for accumulation in organisms.

590-29-4 potassium formate

Log Kow	-2 (OECD 107)
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· **Mobility in soil** No information available.

· **Ecotoxicological effects:**

· **Remark:** Low toxicity to aquatic organisms.

· **Results of PBT and vPvB assessment**

· **PBT:** No.

· **vPvB:** No.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods** The product is not classified as hazardous waste.

· **Recommendation:** Disposal must be made according to official regulations.

· **Uncleaned packagings:**

Thoroughly emptied and clean packagings may be recycled.

Contaminated packaging materials must be disposed of in the same manner as the product.

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN Number**

· **DOT, ADR, ADN, IMDG, IATA** -

· **Proper shipping name (Technical Name)**

· **DOT, ADN, IMDG, IATA** -

· **ADR** -

· **Transport hazard class(es)**

· **DOT, ADR, ADN, IMDG, IATA** -

· **Class** -

· **Packing group**

· **DOT, ADR, IMDG, IATA** -

· **Environmental hazards:** Not applicable.

· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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· **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

Not listed.

· **IARC (International Agency for Research on Cancer)**

Not listed.

· **NTP (National Toxicology Program)**

Not listed.

· **Inventory status:**

· **Australian Inventory of Chemical Substances (AICS)**

All ingredients are listed.

· **Canadian Domestic Substance List (DSL)**

All ingredients are listed.

· **Canadian Non Domestic Substance List (NDSL)**

Not listed.

· **Chinese Chemical Inventory of Existing Chemical Substances (CIECS)**

All ingredients are listed.

· **European EINECS/ELINCS Listing**

All ingredients are listed.

· **Japan Existing and New chemical Substance List (ENCS)**

All ingredients are listed.

· **Korea Existing Chemical Inventory (KECI)**

All ingredients are listed.

· **Philippines Inventory of Chemicals and Chemical Substances (PICCS)**

Not listed.

· **TSCA listing**

All ingredients are listed.

· **Other regulations, limitations and prohibitive regulations** Not applicable

· **State of California, Proposition 65:**

· **Chemicals known to cause cancer:**

Not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Not listed.

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· Chemicals known to cause reproductive toxicity for males:

Not listed.

· Chemicals known to cause developmental toxicity:

Not listed.

· Additional information:

Department of Energy, Protective Action Criteria (PAC) Rev 27: Chemicals with AEGLs, ERPGs or TEELs (February 1, 2012):

Potassium formate

PAC-1 is: 9 mg/m³.PAC-2 is: 99 mg/m³.PAC-3 is: 600 mg/m³.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Corporate EHSQ Perstorp Holding AB
- *** Data compared to the previous version altered.**

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