

Safety Data Sheet
acc. to OSHA HCS

Version: 2

Reviewed on 01/27/2016

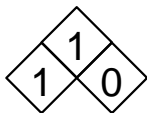
1 Identification

- Product identifier
- Product name: Sodium Formate Deicer
- Product status:
- Product identifier
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture Deicing agent
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Perstorp Specialty Chemicals AB
SE-284 80 Perstorp, Sweden
Tel. +46 435 38000
Fax +46 435 38100
www.perstorp.com
- Bare Ground
PO Box 3477
Framingham, MA 01705
888-800-8356
-
- Emergency telephone number: 1 866 519 4752 (Contract No. : 334101)

2 Hazard(s) identification

- Classification of the substance or mixture
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
- The product is not classified according to the Globally Harmonized System (GHS).

- Label elements
- Hazard pictograms Not applicable
- Supplementary hazard information Not applicable
- Hazards not otherwise classified (HNOC) May be harmful if swallowed.
- Unknown acute toxicity: 1%
- Classification system:
- NFPA ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

- HMIS-ratings (scale 0 - 4)

HEALTH	1
FIRE	1
REACTIVITY	0

Health = 1
Fire = 1
Reactivity = 0

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

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· **vPvB:** No.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures** Yes.

· **Chemical components:**

141-53-7	sodium formate	> 98%
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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:**

First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **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:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

· **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**

Ensure adequate ventilation

If dusty conditions wear respiratory protective device with dust filter, gloves and protective clothing for hygienic reasons.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Pick up mechanically.

Cover to prevent dust formation.

Clean the affected area carefully; suitable cleaners are:

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water

- **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.

- Ensure good ventilation/exhaustion at the workplace.

- **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 in cool, dry place in tightly closed receptacles.

- **Further information about storage conditions:** This product is hygroscopic.

- **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:**

- PARTICULATES NOT OTHERWISE REGULATED TOTAL DUST;

- OSHA Z-1 PEL is: 15 mg/m³.

- PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION;

- OSHA Z-1 PEL is: 5 mg/m³.

- **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.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment:**

- Wear respiratory device with dust filter (minimum N95) in case of insufficient ventilation.

- **Protection of hands:**



Protective gloves

- **Material of gloves**

- Chloroprene rubber, CR

- Nitrile rubber, NBR

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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 required.

- **Risk management measures** Not applicable

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Granulate

Color: White

- **Odor:** Odorless

- **Change in condition**

Melting point/Melting range: 253-255 °C (487-491 °F)

Boiling point/Boiling range: Decomposes.

- **Flash point:** Not applicable.

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

- **Danger of explosion:** Not explosive.

- **Explosion limits:** Not applicable

- **Oxidizing properties** Not oxidizing.

- **Vapor pressure:** Not applicable.

- **Density:** 850-950 g/l

- **Solubility in / Miscibility with**

Water: Easily soluble.

- **Segregation coefficient (n-octanol/water):** See section 12.

- **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.

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- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** None known.
- **Incompatible materials:** None known.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

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

- **LD/LC50 values:**

141-53-7 sodium formate

Oral	LD50	3000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat) (OECD 402)
Inhalative	LC0(4h)	>0.67 mg/m ³ (rat) (EPA OTS 798.1150)

- **Remark:** The maximal attainable dust concentration of 0.67 mg/l produced no signs of toxicity.
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Sensitization** No skin sensitization. (OECD 406)*
- **Carcinogenicity:**
Animal studies have not shown any carcinogenic potential. *

141-53-7 sodium formate

Oral	NOAEL/104 weeks	2000* mg/kg bw/day (rat) (OECD 453)
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- **Mutagenicity:**
The product is not considered to be mutagenic.
In vitro:
Not mutagenic in Bacterial Reverse Mutation Assay. (OECD 471)
Not mutagenic in mammalian cells. (OECD 476)*
The product is not clastogenic. Mammalian Chromosomal Aberration Test (OECD 473).*
In vivo:
Did not induce mutations in the Drosophila SLRL test in vivo. (OECD 477)
- **Reproductive toxicity:**
No impairment of fertility has been observed.
No embryotoxic or teratogenic effects have been observed.

141-53-7 sodium formate

Oral	NOAEL Development	1000 mg/kg bw/day (rat) (OECD 414)
	NOAEL Fertility	1000 mg/kg bw/day (rat) (OECD 416)

- **Remark:** * read-across from supporting substance (structural analogue)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
Low toxicity to aquatic organisms.

141-53-7 sodium formate

EC50/48h	> 1000 mg/l (Daphnia magna) (EPA-660/3-75-009)
EC50/72h	> 1000* mg/l (Pseudokirchnerella subcapitata)
LC50/96h	> 1000 mg/l (Oncorhynchus mykiss) (EPA OTS 797.1400)

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- **Persistence and degradability**
The product is readily biodegradable.

141-53-7 sodium formate	
BOD28	86 % (bacteria) (OECD 306)

- **Bioaccumulative potential**
Does not accumulate in organisms

141-53-7 sodium formate	
log Pow	<-1.8 (-) (OECD 107)

- **Mobility in soil**
The product is not expected to adsorb to a high degree to suspended solids and sediment based upon the log Pow.
- **Results of PBT and vPvB assessment**
- **PBT:** No.
- **vPvB:** No.
- **Other adverse effects** No further relevant information available.
- **Remark:** * read-across from supporting substance (structural analogue)

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.

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.

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

All ingredients are listed.

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

All ingredients are 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.

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

Not listed.

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· Chemicals known to cause developmental toxicity:

Not listed.

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.

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- *** Data compared to the previous version altered.**

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