

1 Identification

- **Product identifier**
- **Product name:** Sodium Formate tech
- **Product status:**
- **Product identifier**
Sodium formate
CAS No.: 141-53-7
EC No.: 205-488-0
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Industrial use**
Industrial manufacturing
Manufacture of substances
Distribution and storage
Formulations
Use:
as a processing aid
as an intermediate
as pH-regulator
as an additive for tanning agents
in anti-freeze and de-icing products
in drilling fluids
for printing and reproduction of recorded media
for formulation of heat transfer fluids and special lubricants
Manufacture:
of textiles
of leather
of fur
- **Professional use**
Use:
in liquid detergents
in anti-freeze and de-icing products
in washing and cleaning products
in drilling fluids
in laboratories
- **Consumer use**
Use:
in liquid detergents
- **Uses advised against** Not identified.
- **Application of the substance / the mixture**
Initial product for chemical reactions
Agricultural chemicals
- **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

Perstorp Polyols, Inc.
600 Matzinger Road
Toledo, Ohio 43612
Phone: 419-729-5448
800-537-0280
Fax: 419-729-3291

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polyolinfo@perstorp.com
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 substance 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
- **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.
- **vPvB:** No.

3 Composition/information on ingredients

- **Chemical characterization: Substances** Yes.

- **Chemical components:**

141-53-7	sodium formate	90-100%
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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:**
First aid measures not required, but rinse opened eye under running water for personal comfort to avoid mechanical irritation.
- **After swallowing:** 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.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
All types of extinguishing media are suitable. Use fire extinguishing methods suitable to surrounding conditions.
- **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:** No special measures required.

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:**
Cover to prevent dust formation.
Clean the affected area carefully; suitable cleaners are:
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** 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:** No special requirements.
- **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:**
10 mg/m³ for PNOC (Total dust) ACGIH TLV-TWA
3 mg/m³ for PNOC (Respirable fraction) ACGIH TLV-TWA

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• **Additional information:**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not 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 not really required. However, we recommend using protective gloves made of rubber.

• **Material of gloves**

Chloroprene rubber, CR

Nitrile rubber, NBR

• **Eye protection:**



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.

9. Physical and chemical properties

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

• **General Information**

• **Appearance:**

Form: Crystalline powder

Color: White

• **Odor:** Mild

• **Odour threshold:** Not determined

• **pH-value:** Not applicable

• **Change in condition**

Melting point/Melting range: 258 °C (496 °F) (OECD 102)

Boiling point/Boiling range: Decomposes.

• **Flash point:** Not applicable.

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

• **Ignition temperature:**

Decomposition temperature: >411 °C (>772 °F) (ASTM E 537-02)

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

• **Explosion limits:** Not applicable

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• Oxidizing properties	Not oxidizing.
• Vapor pressure at 25 °C (77 °F):	1.0 x 10 ⁻⁵ Pa (MPBPWIN (v1.43))
• Density at 20 °C (68 °F):	1.91 g/cm ³ (15.939 lbs/gal) (ISO 1183-1)
• Bulk density at 20 °C (68 °F):	0.66-0.98 g/cm ³ (5.508-8.178 lbs/gal) (Method 214)
• Solubility in / Miscibility with Water:	Easily soluble.
• Segregation coefficient (n-octanol/water) at 20 °C (68 °F):	<-1.8 (OECD 107)
• 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** No hazardous reactions known under intended use.
- **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:**

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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.
(OECD 404)

• **on the eye:**

Slightly irritating.
(EPA OTS 798.4500)

• **Sensitization** No skin sensitization. (OECD 406)*

• **Carcinogenicity:**

Animal studies have not shown any carcinogenic potential. *

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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:

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- Not mutagenic in Bacterial Reverse Mutation Assay. (OECD 471)
- Not mutagenic in mammalian cells. (OECD 476)*
- The substance 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.

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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.

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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)

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

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BOD28	86 % (bacteria) (OECD 306)
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- **Bioaccumulative potential**
 - Does not accumulate in organisms

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log Pow	<-1.8 (-) (OECD 107)
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- **Mobility in soil**
 - The substance 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.
- **Uncleaned packagings:**
 - Thoroughly emptied and clean packagings may be recycled.
 - Contaminated packaging materials must be disposed of in the same manner as the product.

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· **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, ADR, ADN, IMDG, IATA | - |
| · 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. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |

15 Regulatory Information

- **Sara**

· Section 355 (extremely hazardous substances):
Substance is not listed.
- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **Carcinogenic categories**

· EPA (Environmental Protection Agency)
Substance is not listed.
- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **Inventory status:**

· Australian Inventory of Chemical Substances (AICS)
Substance is listed.
- **Canadian Domestic Substance List (DSL)**

Substance is listed.

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

Substance is not listed.

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

Substance is listed.

· **European EINECS/ELINCS Listing**

Substance is listed.

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

Substance is listed.

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

Substance is listed.

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

Substance is listed.

· **TSCA listing**

Substance is listed.

· **Other regulations, limitations and prohibitive regulations**

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

· **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Additional information:**

DOE. Protective Action Criteria (PAC) Rev 27: Chemicals with AEGLs, ERPGs or TEELs (February 1, 2012)

PAC-1 is: 18 mg/m³.

PAC-2 is: 200 mg/m³.

PAC-3 is: 1200 mg/m³.

Texas, Effects Screening Levels (Texas Commission on Environmental Quality, as updated through March 17, 2014)

Name: SODIUM FORMATE

Short-term ESL: 50 ug/m³

Short-term exposure time: 1 hr

Annual ESL: 5 ug/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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