Material Safety Data Sheet

Revision Date: 14.10.2021

SODIUM FORMATE

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

1.1 Product identifier

- Trade name : Sodium Formate
- CAS No. : 141-53-7

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

Uses of the Substance / Mixture

- Leather tanning agent
- Bleaching agent
- Deicing agent raw material
- Mining (Ore flotation)
- Oilfield drilling muds

1.3. Company/Undertaking Identification

Address : **NOVICHEM CO.**
No.30, Magnolia Str, Qaem Maqam Farahani Ave.
Tehran 15886/13941 IRAN

1.4. Emergency and contact telephone numbers

Contact telephone number (Product information): : **+98-21-88329799 (Hunting)**

SECTION 2: Hazards identification

Classification

Label elements

Symbols/Pictograms
Not applicable

Signal word
No

Hazard statements
None

Precautionary Statements
Not applicable

Supplemental information
Not applicable.

Hazards not otherwise classified (HNOC)
None known

Unknown Acute Toxicity
Not applicable.

SECTION 3: Composition/information on ingredients

Substance

Chemical Name	CAS No	Weight-%
Sodium formate	141-53-7	>97

Additional information
No information available

SECTION 4: First aid measures

Description of first aid measures

Inhalation First aid measures not required, but get fresh air for personal comfort.

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

Eye contact First aid measures not required, but rinse opened eye under running water for personal comfort to avoid mechanical irritation.

Ingestion If a large quantity has been ingested or if you feel unwell, get medical advice/attention.

Most important symptoms and effects, both acute and delayed
None known.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Water with full jet as this can form a dust cloud.

Specific hazards arising from the chemical
Hazardous combustion products
Carbon monoxide (CO). Carbon dioxide (CO_2).

Protective equipment and precautions for firefighters
No special protective equipment required.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

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

Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so

Small spill	Vacuum or sweep material and place in a disposal container.
Large spill	Cover powder spill with plastic sheet or tarp to minimize spreading. Vacuum or sweep material and place in a disposal container.

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Clean contaminated surface thoroughly. Use personal protective equipment as required. Avoid creating dust.

Reference to other sections

See Section 7, 8, 13 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protection recommended in Section 8. Avoid generation of dust. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Very hygroscopic; protect from moisture.

SECTION 8: Exposure controls/personal protection

Control parameters

Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Particulates not otherwise classified (PNOC)	TWA: 10 mg/m³ inhalable particles, recommended TWA: 3 mg/m³ respirable particles, recommended	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction TWA: 15 mppcf respirable fraction TWA: 50 mppcf total dust	Not available

Component	Alberta	British Columbia	Ontario	Quebec
Particulates not otherwise classified (PNOC) RR-00072-6 (0)	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³ TWA: 3 mg/m³	TWA: 10 mg/m³

Appropriate engineering controls

Eyewash stations. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles)
Hand Protection	Protective gloves not really required. However, we recommend using protective gloves made of rubber. Chloroprene rubber, CR. Nitrile rubber, NBR.
Skin and body protection	Normal work clothes for the chemical industry (long-legged pants and sleeves).
Respiratory protection	Provide suction extractors if dust is formed or use dust filter mask (minimum N95).

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

powder
crystalline
white

Odor Mild
Odor threshold Not applicable

Property	Value	Remarks • Method
pH		Not applicable
Melting point / freezing point	258 °C	OECD Test No. 102: Melting Point/ Melting Range
Boiling point / boiling range		Decomposes, ASTM E 537-02
Flash point		Not applicable
Evaporation rate		Not applicable
Flammability (solid, gas)		Not flammable
Explosive limits		
Upper explosive limits		Not applicable
Lower explosive limits		Not applicable
Vapor pressure	1.0 x 10-5 Pa	MPBPWIN v1.43
Vapor density		Not applicable
Relative density		No information available
Water solubility		Soluble in water
Solubility(ies)		No information available
Partition coefficient	< -1.8	No information available OECD Test No. 107: Partition Coefficient (n-octanol/water): Shake Flask Method
Autoignition temperature		No information available
Decomposition temperature	411 °C	ASTM E 537-02
Kinematic viscosity		Not applicable
Dynamic viscosity		Not applicable
Explosive properties	Not explosive.	
Oxidizing properties	Not oxidizing.	
Density	1.91 g/cm^3	ISO 1183-1
Bulk density		No information available

Other Information

No information available

SECTION 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
Stable under normal conditions.

Possibility of Hazardous Reactions
No dangerous reactions known under normal conditions of use.

Conditions to avoid
None known.

Incompatible materials
None known.

Hazardous decomposition products
None known.

SECTION 11: Toxicological information

Information on likely routes of exposure
Inhalation. Dermal.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

Numerical measures of toxicity

Unknown Acute Toxicity Not applicable.

Acute toxicity
May be harmful if swallowed.

Sodium formate (141-53-7)				
Method	Species	Exposure route	Effective dose	Remarks
OECD Test No. 420: Acute Oral Toxicity - Fixed Dose Procedure	Rat	Oral	3000	LD50 (lethal dose) mg/kg
OECD Test No. 402: Acute Dermal Toxicity	Rat	Dermal	>2000	LD50 (lethal dose) mg/kg
EPA OTS 798.1150	Rat	Inhalation	>0.67	LC0 mg/m³ The maximal attainable dust concentration of 0.67 mg/l produced no signs of toxicity.

Skin corrosion/irritation
Non-irritating to the skin.

Sodium formate (141-53-7)			
Method	Species	Exposure route	Results:
OECD Test No. 404: Acute Dermal Irritation/Corrosion	rabbit	Dermal	Non-irritant

Serious eye damage/eye irritation
Non-irritant.

Sodium formate (141-53-7)			
Method	Species	Exposure route	Results:
OECD Test No. 405: Acute Eye Irritation/Corrosion	rabbit	Eye	Non-irritant No classification according to GHS criteria.

Respiratory or skin sensitization
No sensitising effects known.

Sodium formate (141-53-7)			
Method	Species	Exposure route	Results:
OECD Test No. 406: Skin Sensitization	Guinea pig	Skin	Not a skin sensitizer read-across from supporting substance (structural analogue)

Germ cell mutagenicity
Not mutagenic.

Sodium formate (141-53-7)		
Method	Species	Results:
OECD Test No. 471: Bacterial Reverse Mutation Test	in vitro	Negative
OECD Test No. 476: In vitro Mammalian Cell Gene Mutation Test	in vitro	Negative read-across from supporting substance (structural analogue)
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test	in vitro	Negative read-across from supporting substance (structural analogue)
OECD Test No. 477: Genetic Toxicology: Sex-Linked Recessive Lethal Test in Drosophila melanogaster	in vivo	Negative

SECTION 12: Ecological information

Toxicity
Low toxicity to aquatic organisms.

Sodium formate (141-53-7)					
Method	Species	Exposure route	Effective dose	Exposure time	Remarks
EPA OTS 797.1400	Oncorhynchus mykiss (rainbow trout)	Freshwater	>1000	96h	LC50 (lethal concentration) mg/l
EPA-660/3-75-009	Daphnia magna	Freshwater	>1000	48h	EC50 (effective concentration) mg/l
OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	Freshwater	>1000	72h	EC50 (effective concentration) mg/l read-across from supporting substance (structural analogue)

Persistence and degradability
Readily biodegradable.

Sodium formate (141-53-7)			
Method	Value	Exposure time	Results:
OECD Test No. 306: Biodegradability in Seawater	86%	28d	Readily biodegradable
DIN EN 1899 BOD	3940	5d	mgO2/kg

Bioaccumulative potential
Not potentially bioaccumulable.

Chemical Name	Partition coefficient	Bioconcentration factor (BCF)
Sodium formate	-1.8	

Mobility in soil
The substance is not expected to adsorb to a high degree to suspended solids and sediment based upon the log Pow.

Other adverse effects
None known.

SECTION 13: Disposal considerations

Disposal methods
Disposal should be in accordance with applicable regional, national and local laws and regulations. Incinerate at a licensed installation.

Contaminated packaging
Thoroughly emptied and clean packaging may be recycled.

SECTION 14: Transport information

TDG Road transport Not regulated

RID Rail transport Not regulated

IMDG Sea transport Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

IATA Air transport Not regulated

SECTION 15: Regulatory information

International Regulations
Not applicable.

National regulations

Canada
See section 8 for national exposure control parameters.

WHMIS Hazard Class
Non-controlled

SECTION 16: Other information

Information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.