

SAFETY DATA SHEET

SODIUM FORMATE

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SODIUM FORMATE Chemical Formula: CHO ₂ Na UN Number: Not regulated Hazchem code: None allocated CAS No: 141-53-7 Uses: In dyeing industry, paper industry, leather tanning process, electroplating process, initial product for chemical reactions, agricultural chemicals	Contact Information: Methanol Chemicals Company (CHEMANOL) P.O. Box: 2101 Jubail Industrial City, 31951 Kingdom of Saudi Arabia. Website: www.chemanol.com. Tel. No: 00966-13-343-8322 Emergency Contact No: 00966-13-343-8999
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SECTION II: HAZARDS IDENTIFICATION

Classification of the substance or mixture:	
Acute toxicity – Oral	Category 5
Label elements	
Symbols/Pictograms	
Not applicable	
Signal word	
Warning	
Hazard statement	H303-May be harmful if swallowed
Precautionary statement	P312 –Call a POISON CENTER or doctor if you feel unwell.
Other Hazards	
None known	

SECTION III: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical composition

Name	CAS # / EC Number	% by Weight
Sodium formate	141-53-7/205-488-0	97 Min

Additional information

No information available

SECTION IV: FIRST AID MEASURES

After inhalation: Take affected persons into fresh air; restore breathing, First Aid measures not required.

After skin contact: Rinse with warm water.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: Induce vomiting of conscious patient immediately by giving plenty of water to drink. Consult physician immediately in case of an unconscious victim.

Most important symptoms and effects, both acute and delayed

None known

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION V: FIRE FIGHTING MEASURES

Suitable extinguishing agents:

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

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 Protective equipment: No special measures required.

Protective equipment and precautions for firefighters.

No special protective equipment required.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedure

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

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 13 for Disposal.

SECTION VII: 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.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Packing: In 25 kgs polypropylene bags & in 500/1000 kgs polypropylene jumbo bags.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

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

Ingredients with limit values that require monitoring at the work place:

The Product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

OES: Short term value * 15 mg/m³

Long term value * 10 mg, ** 5mg/m³

* Total inhalable dust ** Respirable dust.

OSHA PEL: TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction

ACGIH: TWA: 10 mg/m³ inhalable particles, recommended, TWA: 3 mg/m³ respirable particles, recommended

NIOSH: None listed

Ontario/ Alberta/ British Columbia: TWA: 10 mg/m³ total dust TWA: 3 mg/m³ Respirable fraction.

Appropriate engineering controls: Eyewash stations. Ensure adequate ventilation, especially in confined area

Personal protective equipment: General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Suitable respiratory protective device recommended.

Skin and body protection: Normal work clothes for the chemical industry (long-legged pants and sleeves).

Protection of hands:



Protective gloves

Material of gloves: Chloroprene rubber, CR Nitrile rubber, NBR.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Safety glasses.

SECTION IX: 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
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pH	Not applicable	
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Melting point / freezing point	258 °C OECD	Test No. 102: Melting Point/ Melting Range
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Boiling point / boiling range		Decomposes, ASTM E 537-02
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Flash point		Not applicable
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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 OECDTest No. 107: Partition Coefficient (n-o ctanol/water): Shake Flask Method
Auto ignition 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

SECTION X: 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 XI: 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

Acute toxicity: May be harmful if swallowed.

LD/LC50 values relevant for classification:

141-53-7 sodium formate

Oral (OECD Test No. 420)	LD50	3000mg/kg(rat)
Dermal (OECD Test No. 402)	LD50	>2000mg/kg(rat)
Inhalation (EPA OTS 798.1150)	LC0 mg/m3	>0.67 mg/l (rat) 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 sensitizing 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

Carcinogenicity: There is no indication for any carcinogenic potential since all in vitro mutagenicity studies are

negative.

Reproductive toxicity: This product does not contain any known or suspected reproductive hazards.

STOT - single exposure: No known effect.

STOT - repeated exposure.

Sodium formate (141-53-7)

Method	Species	Exposure route	Effective dose	Remarks
OECD Test No. 408: Repeated Dose 90- Day Oral Toxicity Study in Rodents	Rat	Oral	3138	NOAEL mg/kg bw/day read-across from supporting substance (structural analogue)

Aspiration hazard : Not applicable

SECTION XII: ECOLOGICAL INFORMATION

Toxicity: Low toxicity to aquatic organisms.

Eco toxicological effects

Aquatic toxicity: Low toxicity to aquatic organism.	
141-53-7 sodiumformate	
EC50/48h	>1000mg/l (daphnia)
EC50/72h	>1000mg/l (alga & Cyanobacteria)
LC50/96h	>1000mg/l (Oncorhynchus mykiss (rainbow trout))

Remark: Harmless to fish up to the tested concentration

Information about elimination (persistence and degradability):	
141-53-7 sodiumformate	
BOD28	86%(OECD306)
COD	240mg/g(O2)
Zahn-Wellen	100%

The product is readily biodegradable.

Behavior in environmental systems:

Bioaccumulation potential: Not potentially bioaccumulable

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

SECTION XIII: DISPOSAL CONSIDERATION

Recommendation: Disposal must be made according to official regulations.

SECTION XIV: TRANSPORT INFORMATION

Land transport ADR/RID (cross-border)

ADR/RID class: Not Regulated

Maritime transport IMDG:

IMDG Class: : Not Regulated -

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: Not Regulated

DOT regulations (United States):

Hazard class: -



Transport/additional information: Not dangerous according to above specifications.

SECTION XV: REGULATORY INFORMATION

HMIS:

HealthHazard:1

Fire Hazard:1

Reactivity: 0

Personal Protection: E

Health Hazard	1
Fire Hazard	1
Physical Hazard	0
Personal Protection	E

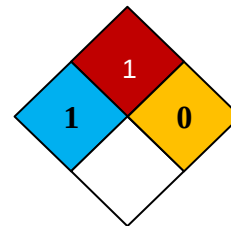
NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A):

Health:1

Flammability:1

Reactivity: 0

Specific Hazard:



Labeling according to EU guidelines

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials.

Observe the general safety regulations when handling chemicals.

National regulations:

Registrations

TSCA (USA)	DSL (Canada)	ENCL (Japan)	ECL (Korea)	AICS (Australia)	IECSC (China)
YES	YES	YES	YES	YES	YES

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

SECTION XVI: OTHER INFORMATION

Information contact: Quality Control and Product Development Department

For any enquiry/comment regarding this Material Safety Data Sheet,

Kindly contact: Contact@Chemanol.com

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