

**Section 1: Product & Company Information**

**Product Identifier:** Sodium Formate

**Other Means of Identification**

Product Number: No data available.

**Recommended Use and Restrictions on Use**

Recommended Use: Reducing Agent

Restrictions on Use: No known.

**Manufacturer / Importer / Supplier / Distributor Information**

**Company Name:** CORECHEM Inc.

**Address:** 4320 Greenway Drive  
Knoxville, TN 37918  
USA

**Information Telephone Number:** 1-865-524-4239

**Fax Number:** 1-865-524-3375

**Website:** www.corecheminc.com

**Contact Person:** Regulatory Manager

**E-mail:** regulatory@corecheminc.com

**Emergency Phone Number:** Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

**Section 2: Hazards Identification**

**GHS Hazard Classification(s)**

Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

**Physical Hazard(s)**

Not classified.

**Health Hazard(s)**

Not classified.

**Environmental Hazard(s)**

Not classified.

**Label Elements**

**Signal Word**

No signal word

**Hazard Symbol(s)**

No symbol

**Hazard Statement(s)**

Not applicable.

**Precautionary Statements**

**General**

Not applicable.

**Prevention**

Not applicable.

**Response**

Not applicable.

**Storage**

Not applicable.

**Disposal**

Not applicable.

**Hazard(s) not otherwise classified (HNOC)**

None known.

**Section 3: Composition/Information on Ingredients**

**Substance**

The components are not hazardous or are below required disclosure limits.

#### Section 4: First-Aid Measures

**General Information**

Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin Contact**

Wash skin with soap and water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

**Eye Contact**

Flush thoroughly with water. If irritation occurs, get medical assistance.

**Ingestion**

Rinse mouth. Call a physician or poison control center if you feel unwell.

**Most important symptoms/effects, acute and delayed**

**Symptoms**

Irritating to eyes, respiratory system and skin.

**Indication of immediate medical attention and special treatment needed**

**Hazards**

No data available.

**Treatment**

Treat symptomatically. Symptoms may be delayed.

#### Section 5: Fire-Fighting Measures

**General Fire Hazards**

In case of fire and/or explosion do not breathe fumes.

**Suitable (and Unsuitable) Extinguishing Media**

**Suitable Extinguishing Media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable Extinguishing Media**

None known.

**Specific Hazards Arising from the Chemical**

During fire, gases hazardous to health may be formed.

**Special Protective Equipment and Precautions for Firefighters**

**Special Fire-Fighting Equipment Procedures**

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special Protective Equipment for Fire-Fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

#### Section 6: Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures**

Keep unauthorized personnel away. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and Materials for Containment and Clean-Up**

Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

**Notification Procedures**

Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental Precautions**

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

#### Section 7: Handling and Storage

**Precautions for Safe Handling**

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not smoke when using this product. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Wash thoroughly after handling.

**Conditions for Safe Storage, including any Incompatibilities**

Keep container tightly closed. Store in a cool, dry, well-ventilated place.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

#### Occupational Exposure Limits

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

#### Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

### Appropriate Engineering Controls

No data available.

### Individual protection measures, such as personal protective equipment (PPE)

#### General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

#### Eye/Face Protection

Use tight fitting goggles if dust is generated.

#### Skin Protection

##### Hand Protection

Wear appropriate chemical resistant gloves.

##### Other

Wear appropriate chemical resistant clothing.

#### Respiratory Protection

In case of inadequate ventilation use suitable respirator.

#### Hygiene Measures

Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## Section 9: Physical and Chemical Properties

### Appearance:

Physical State: Solid  
Color: White

### Odor:

Odorless

### Odor Threshold:

No data available.

### pH:

7.0 - 8.5 (20 °C) (1.0 M aqueous solution)

### Melting Point/Freezing Point:

253 °C

### Initial Boiling Point and Boiling Range:

Decomposes

### Flash Point:

Not applicable.

### Evaporation Rate (butyl acetate=1):

No data available.

### Flammability (solid, gas):

No data available.

### Upper/Lower Limit on Flammability or Explosive Limits

Flammability Limit – Upper: No data available.

Flammability Limit – Lower: No data available.

Explosive Limit – Upper: No data available.

Explosive Limit – Lower: No data available.

### Vapor Pressure:

No data available.

### Vapor Density (air =1):

No data available.

### Relative Density (water=1):

1.92 (20 °C)

### Solubility(ies):

Solubility in water: 970 g/l (20 °C)

Solubility (other): ether: Practically Insoluble  
glycerol: Soluble

### Partition coefficient (n-octanol/water):

No data available.

### Auto-Ignition Temperature:

No data available.

### Decomposition Temperature:

No data available.

### Viscosity:

No data available.

### Other Information:

Molecular Weight: 68.02 g/mol  
Formula:  $\text{CH}_2\text{O}_7\text{Na}$

## Section 10: Stability and Reactivity

### Reactivity

Contact with acid liberates poisonous gas.

### Chemical Stability

Material is stable under normal conditions.

**Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

**Conditions to Avoid**

Contact with incompatible materials. Water, moisture. The substance is hygroscopic and will absorb water by contact with the moisture in the air.

**Incompatible Materials**

Strong acids.

**Hazardous Decomposition Products**

Thermal decomposition may release oxides of carbon.

**Section 11: Toxicological Information**

**Information on routes of exposure**

**Ingestion:** May cause irritation of the gastrointestinal tract.

**Inhalation:** Dust may irritate respiratory system.

**Skin Contact:** May cause irritation.

**Eye Contact:** Dust in the eyes will cause irritation.

**Information on Toxicological Effects**

**Acute Toxicity (List all possible routes of exposure)**

**Oral**

Sodium Formate: LD 50 (Mouse): 11,200 mg/kg

**Dermal**

No data available.

**Inhalation**

No data available.

**Repeated Dose Toxicity**

No data available.

**Skin Corrosion/Irritation**

May cause skin irritation.

**Serious Eye Damage/Eye Irritation**

May irritate eyes.

**Respiratory/Skin Sensitization**

Not a skin sensitizer.

**Carcinogenicity**

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**US. National Toxicology Program (NTP) Report on Carcinogens**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Germ Cell Mutagenicity**

**In Vitro**

No mutagenic components identified.

**In Vivo**

No mutagenic components identified.

**Reproductive Toxicity**

None known.

**Specific Target Organ Toxicity – Single Exposure**

None known.

**Specific Target Organ Toxicity – Repeated Exposure**

None known.

**Aspiration Hazard**

Not classified.

**Other Effects**

None known.

**Section 12: Ecological Information**

**Ecotoxicity**

**Acute Hazards to the Aquatic Environment**

**Fish**

Sodium Formate: LC 50 (Bluegill (*Lepomis macrochirus*), 24 h): 5,000 mg/l Mortality

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Chronic Hazards to the Aquatic Environment**

**Fish**

No data available.

**Aquatic Invertebrates**

No data available.

**Toxicity to Aquatic Plants**

No data available.

**Persistence and Degradability**

**Biodegradation**

There are no data on the degradability of this product.

**BOD/COD Ratio**

No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

No data available.

**Mobility in Soil**

The product is water soluble and may spread in water systems.

**Other Adverse Effects**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Section 13: Disposal Considerations**

**Disposal Instructions**

Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging**

Since emptied containers retain product residue, follow label warnings even after container is emptied.

**Section 14: Transportation Information**

**US Department of Transportation (DOT)**

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

**Section 15: Regulatory Information**

**US Federal Regulations**

**Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)**

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)**

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

**Clean Air Act (CAA), Section 112(r)**

No chemical(s) in this material are subject to the reporting requirements of CAA.

**Emergency Planning and Community Right-To-Know Act (EPCRA)**

**EPCRA 302 Extremely Hazardous Substance**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

**EPCRA 304 Emergency Response Notification**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

**EPCRA 311/312 Emergency and Hazardous Materials Reporting**

Fire Hazard: No

Sudden Release of Pressure: No  
Reactive: No  
Acute (Immediate) Health Hazard: No  
Chronic (Delayed) Health Hazard: No

**EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting**

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

*Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.*

**Section 16: Other Information**

**Hazardous Materials Identification System (HMIS®) Classification**

Health Hazard: 1

Chronic Health Hazard: /

Flammability: 0

Physical Hazard: 0

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

**National Fire Protection Association (NFPA 704) Rating**

Health Hazard: 1

Fire Hazard: 0

Reactivity Hazard: 0

Special: N/A

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

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**Key to Abbreviations and Acronyms**

ATE - Acute Toxicity Estimate  
BCF - Bioconcentration Factor  
EC50 - Effective concentration, 50%  
IDHL - Immediately Dangerous to Life and Health  
Kg - Kilogram  
l - Liter  
lb - Pound  
LC50 - Lethal Concentration, 50%  
LD50 - Lethal Dose, 50%  
mg - milligram  
ml - milliliter  
N/A - Not Applicable  
N/D - Not Determined  
PEL - Permissible Exposure Limit  
REL - Recommended Exposure Limit  
STEL - Short-term Exposure Limit  
TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists  
AIHA - American Industrial Hygiene Association  
BEI - Biological Exposure Indices  
CAS - Chemical Abstracts Service  
DOT - US Department of Transportation  
EPA - US Environmental Protection Agency  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC - Intermediate Bulk Container  
IMDG - International Maritime Dangerous Goods  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - US Occupational Health and Safety Administration  
SARA - US EPA Superfund Amendments and Reauthorization Act  
TSCA - US EPA Toxic Substances Control Act  
UN - United Nations

**References**

HSDB® - Hazardous Substances Data Bank

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