ESSENTIAL CHEMISTRY. INNOVATIVE SOLUTIONS.

SAFETY DATA SHEET

Print Date: October 1, 2025

Section 1: Product & Company Information

Product Identifier: **Formic Acid 5%**

Other Means of Identification
Product Number: 120032

Recommended Use and Restrictions on Use
Recommended Use: No data available.
Restrictions on Use: No data available.

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)
In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Physical Hazard(s)
Not classified.

Health Hazard(s)
Corrosion/Irritation, Skin – 1A
(Corrosion) Damage/Irritation, Eye - 1
Specific Target Organ Toxicity (STOT), Single exposure - 2

Environmental Hazard(s)
Not classified.

Label Elements
Signal Word
DANGER

Hazard Symbol(s)

Hazard Statement(s)
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H371: May cause damage to organs.

Precautionary Statements
General
Not applicable.

Prevention
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response
P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P321: Specific treatment (see supplemental first aid instructions on this label).
P363: Wash contaminated clothing before reuse.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC)

None known.

Section 3: Composition/Information on Ingredients

Mixture

Chemical Identity [2]	Common Name/Synonym(s)	CAS # [3]	Weight %	Impurity or Stabilizing Additive
Formic acid	---	64-18-6	4 – 6%	None

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation

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

Skin Contact

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Most important symptoms/effects, acute and delayed

Symptoms

No data available.

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

No data available.

Section 5: Fire-Fighting Measures

General Fire Hazards

No data available.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

No data available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

No data available.

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

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipment to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind. Clean contaminated objects and areas thoroughly observing environmental regulations.

Methods and Materials for Containment and Clean-Up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Section 7: Handling and Storage

Precautions for Safe Handling

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed. Avoid contact with skin, eyes or clothing.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Formic acid	TWA	5 ppm	US. ACGIH Threshold Limit Values
Formic acid	STEL	10 ppm	US. ACGIH Threshold Limit Values

Biological Limit Values

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

Appropriate Engineering Controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand and eye-wash facility. And display their position clearly.

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

Wear safety glasses with side shields (or goggles) and a face shield (JIST 8147). Wear a full-face respirator, if needed.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves. (JIST 8116)

Other

Wear appropriate chemical resistant clothing.

Respiratory Protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:	
Physical State:	Liquid
Color:	Colorless
Odor:	Pungent.
Odor Threshold:	No data available.
pH:	1.0-2.5
Melting Point/Freezing Point:	No data available.
Initial Boiling Point and Boiling Range:	No data available.
Flash Point:	No data available.
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)**:**	No data available.
Solubility(ies):	
Solubility in water:	Miscible
Solubility (Ethanol):	Miscible
Partition coefficient (n-octanol/water) (log Pow):	-.54
Auto-Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.

Other Information:

Molecular Weight:	No data available.
Formula:	No data available.

Section 10: Stability and Reactivity

Reactivity

No data available.

Chemical Stability

May be altered by light.

Possibility of Hazardous Reactions

No data available.

Conditions to Avoid

Extremes of temperature and direct sunlight

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Carbon monoxide (CO), Carbon dioxide (CO2)

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Eye Contact: No data available.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Formic Acid: LD50 (Rat) 700 mg/kg

Dermal

No data available.

Inhalation

Formic Acid: LC50 (Rat) 7.4 mg/L

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

No data available.

Serious Eye Damage/Eye Irritation

No data available.

Respiratory/Skin Sensitization

No data available.

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

No data available.

Specific Target Organ Toxicity – Single Exposure

No data available.

Specific Target Organ Toxicity – Repeated Exposure

No data available.

Aspiration Hazard

No data available.

Other Effects

None known.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

Formic Acid: LC50 (Danio Rerio) 1560 mg/L – 96h

Aquatic Invertebrates

Formic Acid: EC50 (Dapnhia Magna) 540 mg/L – 48h

Toxicity to Aquatic Plants

Formic Acid: ErC50 (Desmodesmus) 30.2 mg/L – 72h

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

No data available.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

Section 14: Transportation Information

US Department of Transportation (DOT)

UN Number:	UN3412
UN Proper Shipping Name:	Formic Acid
Technical Name:	-
Hazard Class:	8
Subsidiary Hazard Risk:	-
Packing Group:	III
DOT Label/Placard Exemptions:	Not determined
Special Provisions:	IB3, T4, TP1
Packaging Exceptions:	49CFR 173.154
Packaging Non-Bulk:	49CFR 173.203
Packaging Bulk:	49CFR 173.241
Reportable Quantity (RQ):	5,000lb (2270kg)
Marine Pollutant:	No
Poison Inhalation Hazard:	No
Special precautions for user:	Transport within the user's premises: always transport in closed containers that are upright and secure. Ensure that transporting the product know what to do in the event of an accident or spillage.
Emergency Response Guidebook (ERG) #:	153

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)

The following chemical(s) in this material are subject to reporting levels established by CERCLA:
Formic Acid: CAS 64-18-6 5,000lbs

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:	Yes
Chronic (Delayed) Health Hazard:	No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting
The following chemical(s) in this material are subject to reporting levels established by SARA Title III, Section 313:
Formic Acid: CAS 64-18-6

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
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

REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TWA - Time weighted average
SARA – US EPA Superfund Amendments and Reauthorization Act
TSCA – US EPA Toxic Substances Control Act
UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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