



SAFETY DATA SHEET

(according to (EC) 1907/2006)

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

1.1. Product identifier

Sodium Formate

Synonyms:

Hydroxy benzenesulfonic acid

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

Not applicable

1.3. Details of the supplier of the safety data sheet

Manufacturer Information: Vertellus Health & Specialty
Products LLC, P.O. Box 730,
Delaware Water Gap, PA 18327
USA

Non-Emergency Fax Number:

1-570-421-9012

E-Mail Address:

msds@vertellus.com

Non-Emergency Phone Number: 1-800-344-3426

1.4. Emergency telephone number

Vertellus: 1-800-344-3426

CHEMTREC (USA): 1-800-424-9300 (collect calls accepted); (Int'l): 1-703-527-3887 (collect calls accepted; 011 prefix not needed)

SECTION 2: Hazards identification

HMIS Rating	
HEALTH	2
FLAMMABILITY	1
REACTIVITY	0

2.1. Classification of the substance or mixture

(According to Regulation (EC) No 1272/2008)

Serious Eye Damage/Eye Irritation Category 2

Skin Corrosion/Irritation Category 2

Signal Word:

Warning

Hazard Precautions:

H319 - Causes serious eye irritation.

H315 - Causes skin irritation.

2.2. Label elements

SAFETY DATA SHEET

Hazard Symbols (Pictogram):



Prevention Precautions:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P264 - Wash hands thoroughly after handling.

First Aid Precautions:

P337+P313 - If eye irritation persists: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P362 - Take off contaminated clothing and wash before reuse.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P321 - Specific treatment (see supplemental information on this label).
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

Storage Precautions:

Not required.

Disposal Precautions:

Not required.

Single Exposure Target Organs:

Not applicable

Repeated Exposure Target Organs:

Not applicable

(According to Directive 67/548/EEC)

Symbol: Xi
Risk Phrases: R36/38: Irritating to eyes and skin.
Safety Phrases: Not classified as hazardous under this directive.

2.3. Other hazards

Signs and Symptoms of Potential Overexposure: Single exposure to vapors or mist is not likely to be hazardous. Continued or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Contact with eyes may cause slight irritation. Not likely to be toxic by ingestion. Single dose oral toxicity is low.

Primary Route(s) of Exposure: Skin contact and absorption, eye contact, ingestion, inhalation.

Medical Conditions Aggravated by Exposure: No data found

SAFETY DATA SHEET

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (%)	EINECS / ELINCS	EU Symbol	Risk Phrases
Sodium Formate	141-53-7	99	205-488-0	Xi	R36/38

NOTE: See Section 8 of this MSDS for exposure limit data for these ingredients.
 See Section 15 of this MSDS for trade secret information (where applicable).
 See Section 16 of this MSDS for the full text of the R-phrases above.

SECTION 4: First aid measures

4.1. Description of first aid measures

- Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists.
- Eye Contact:** Rinse eyes immediately with large amounts of water for at least 15 minutes, occasionally lifting the eyelids. GET MEDICAL ATTENTION.
- Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately. If exposed to excessive levels, remove to fresh air and get medical attention if cough or other symptoms develop. Get medical attention immediately.
- Ingestion:** If swallowed, do not induce vomiting. Get prompt medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Acute:** Single exposure to vapors or mist is not likely to be hazardous. Continued or prolonged contact may irritate the skin and cause a skin rash (dermatitis). Contact with eyes may cause slight irritation. Not likely to be toxic by ingestion. Single dose oral toxicity is low.
- Delayed Effects:** None known.

4.3. Indication of any immediate medical attention and special treatment needed

- Thermal Exposure:** Not applicable.
- Note to Physician:** No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Carbon dioxide Dry chemical Alcohol foam Water spray

5.2. Special hazards arising from the substance or mixture

- Hazardous Products of Combustion:** None Known
- Potential for Dust Explosion:** not available
- Special Flammability Hazards:** Material may burn, but does not ignite readily. Avoid high temperature.

5.3. Advice for firefighters

SAFETY DATA SHEET

Basic Fire Fighting Guidance: Evacuate area and fight fire from a safe distance.
 As in any fire, wear pressure-demand self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

Flammability Classification (OSHA): Not known to be sensitive to mechanical impact or static discharges.
 Not applicable.

NFPA Rating



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Special Instructions: Remove all contaminated clothing to prevent further absorption. Decontaminate affected personnel using the first aid procedures in Section 4. Leather shoes that have been saturated must be discarded.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers, and waterways.

6.3. Methods and material for containment and cleaning up

Containment Techniques and Clean-up Procedures: Contain spilled liquid with sand clay. DO NOT use combustible materials such as sawdust. LARGE SPILLS: Shut off leak if safe to do so. Retain all contaminated water for treatment.

Special Reporting Requirements: Not applicable.

6.4. Reference to other sections

Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for Unique Hazards: Not applicable.

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material.

Special Handling Equipment: Use with adequate ventilation.
 S24/25: Avoid contact with skin and eyes.
 Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Keep container closed when not in use.



SAFETY DATA SHEET

Recommendations:

Dangerous Incompatibility Reactions: Can react vigorously with oxidizing materials.

Incompatibilities with Materials of Construction: none known

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits (United States): OSHA PEL: Not established ACGIH TLV: Not established

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Personal Protective Equipment: Safety glasses or chemical goggles. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, the work atmosphere may be deficient of oxygen, or any other circumstances where air purifying respirators may not provide adequate protection, for example, when air purifying respirators have a short break-through time. Chemical goggles; face shields if necessary. Use impervious gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Respirator Caution: Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.

Ventilation: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.

Other Engineering Controls: All appropriate engineering controls should be used to minimize exposure potential. Use exhaust ventilation to keep airborne concentrations below exposure limits.

Thermal Hazards: Not applicable.

Additive or Synergistic Effects: None known.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):	A fine, white crystalline powder with no odor.		
Molecular Formula:	Not applicable	Molecular Weight:	Not applicable
Vapor Pressure:	Not applicable	Evaporation Rate:	Not applicable



SAFETY DATA SHEET

Specific Gravity or Density:	1.92	Vapor Density (air = 1):	Not applicable
Boiling Point:	Not applicable	Freezing / Melting Point:	487 °F
Solubility in Water:		Octanol / Water Coefficient:	Sublimes
pH:	Not applicable	Odor Threshold:	Not applicable
Viscosity:	Not applicable	Autoignition Temperature:	Not applicable
Flash Point and Method:	Not applicable () (Not applicable)	Flammable Limits:	Not applicable (LEL) – Not applicable (UEL)

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

<u>10.1. Reactivity</u>	Not classified as dangerously reactive.
<u>10.2. Chemical stability</u>	Stable
<u>10.3. Possibility of hazardous reactions</u>	Hazardous polymerization will not occur
<u>10.4. Conditions to avoid</u>	Oxidizing materials
<u>10.5. Incompatible materials</u>	Can react vigorously with oxidizing materials.
<u>10.6. Hazardous decomposition products</u>	Products of incomplete combustion may include CO, CO ₂ , NO _x , and dense smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD ₅₀ :	Oral LD50 (rat) 11200 mg/kg
Acute Dermal LD ₅₀ :	Not available.
Acute Inhalation LC ₅₀ :	Not available.
Skin Irritation:	Irritating to the skin.
Skin Sensitization:	No data available.
Eye Irritation:	Causes eye irritation.
Target Organs:	No data available.
Carcinogenicity:	No data available.
Teratogenicity:	No data available.
Reproduction:	No data available.
Neurotoxicity:	No data available.
Mutagenicity:	No data available.



SAFETY DATA SHEET

SECTION 12: Ecological information

<u>12.1. Toxicity</u>	24 HR LC50 LEPOMIS MACROCHIRUS 5000 mg/L 24 HR EC50 DAPHNIA MAGNA > 1000 mg/L
<u>12.2. Persistence and degradability</u>	No data No data available.
<u>12.3. Bioaccumulative potential</u>	No data
<u>12.4. Mobility in soil</u>	No data
<u>12.5. Results of PBT and vPvB assessment</u>	Not available.
<u>12.6. Other adverse effects</u>	No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number:	Not applicable
Waste Classification: (per US regulations)	The waste may be classified as "special" or hazardous per State regulations. NOTE: Generator is responsible for proper waste characterization. State (USA) hazardous waste regulations may differ substantially from federal (USA) regulations.
Waste Disposal:	Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

<u>14.1. UN number</u>	Not applicable
<u>14.2. UN proper shipping name</u>	Chemicals, n.o.s. (Sodium Formate)
<u>14.3. Transport hazard class(es)</u>	Not applicable
<u>14.4. Packing group</u>	Not applicable
<u>14.5. Environmental hazards</u>	Not applicable
<u>14.6. Special precautions for user</u>	Not available.
NA Emergency Guidebook Numbers:	Not applicable
	IMDG EMS: Not applicable
<u>14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</u>	Not applicable.



SAFETY DATA SHEET

Legend of abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CERCLA = Comprehensive Environmental, Response, Compensation and Liability Act (1990).
CFR = Code of Federal Regulations.
DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EEC = European Economic Community.
EINECS = European Inventory of Existing Commercial chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal concentration.
LD = Lethal dose.
MOL = Ministry of Labor.
NEMA = National Emergency Management Agency.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicological Program.
OSHA = Occupational Safety and Health Administration
PEL = Permissible exposure limit.
RQ = Reportable quantity.
SARA = Superfund Amendments and Reauthorization Act of 1986.
TLV = Threshold limit value.
WHMIS = Workplace Hazardous Materials Information System.

Precautionary Statement: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

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