

## Safety Data Sheet


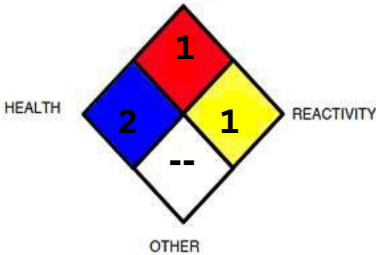
### Section 1: Product & Company Identification

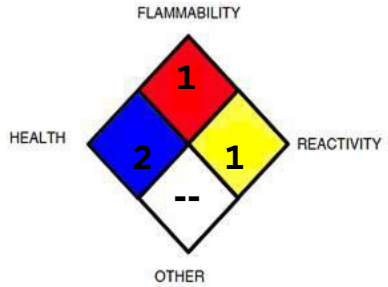
<b>Product Name:</b>	Sodium Formate, ACS Grade
<b>Product #:</b>	S-2077
<b>Synonyms:</b>	Sodium Methanoate, Formic acid sodium salt
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Sodium Formate	141-53-7	N/A	100

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	May cause adverse kidney effects: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Treat symptomatically.
<b>Inhalation:</b>	Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.
<b>Skin:</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.
<b>Eyes:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	Do NOT induce vomiting. Get medical attention.
	See section 11 for more detailed information on health effects & symptoms

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Chemical foam
<b>Hazardous thermal (de)composition products:</b>	<p>Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air.</p> <p>Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sodium oxides</p>
<b>Special Fire Fighting Procedures:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Flash Point:</b>	No data available

## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing. Avoid dust formation. Do not touch damaged packages or spilled material.
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<b>Environmental Precautions:</b>	No data available
<b>Methods for Clean-up:</b>	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep in a dry, cool, and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks, and flame. Protect from direct sunlight
<b>Handling:</b>	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin and eyes. Do not breathe dust.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.</p>	
<b>Skin and Body:</b>	  <p>Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.</p>	

<b>Eyes:</b>	 <p>Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.</p>
<b>Ventilation/Engineering Measures:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink, and animal feeding stuffs. Do not eat, drink, or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.
<b>Other:</b>	Contains no substances with occupational exposure limit values.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	White crystalline powder
<b>Formula</b>	HCO <sub>2</sub> • Na
<b>Molecular Wt.</b>	68.01
<b>Melting Pt.</b>	259-262°C
<b>Boiling Pt.</b>	>300°C
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Soluble in water
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under proper storage conditions
<b>Hazardous decomposition products:</b>	Carbon oxides, Nitrogen oxides
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	LD50 Oral - Mouse - 11,200 mg/kg LD50 Inhalation - Rat - 4 h -670 mg/m <sup>3</sup>
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	IARC: 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. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or, anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or, potential human carcinogen by OSHA. EPA: No classification on carcinogenic data is available from EPA

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	Toxic to fish LC50- <i>Pimephales promelas</i> (fathead minnow) - > 954 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates EC0 - Daphnia magna (Water flea) - > 1,000 mg/l - 24 h EC50 - <i>Daphnia magna</i> (Water flea) - 1,070 mg/l - 48 h Toxicity to algae EC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - 790 mg/l - 96 h
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewer system. Do not allow materials to be released into the environment without proper government permits.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Contaminated Packaging:</b>	Dispose of as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not a shipping hazard
<b>DOT regulations:</b>	Not a shipping hazard
<b>IMDG/IMO (SEA):</b>	Not a shipping hazard
<b>IATA/DGR (AIR):</b>	Not a shipping hazard
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H315 Causes skin irritation H335 May cause respiratory irritation H240 Heating may cause explosion
<b>Risk Phrases:</b>	R5 Explosion risk in case of fire
<b>Safety Phrases:</b>	S7 Keep container tightly closed S15 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking S3/14 Keep cool. Protect from sunlight S22 Avoid breathing dust/fume/gas/mist/vapors/spray S28 Wash face, hands and any exposed skin thoroughly after handling S36/S37 Wear protective gloves/protective clothing/eye protection/face protection
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: Not listed California Proposition 65: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. Pennsylvania State Right to Know: Sodium formate (CAS 141-53-7) New Jersey State Right to Know: Sodium formate (CAS 141-53-7)
<b>U.S. Federal Regulations:</b>	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found.

	<p>Clean Water Act (CWA) 307: No products were found.          Clean Water Act (CWA) 311: No products were found.          Clean Air Act (CAA) 112 accidental release prevention: No products were found.          Clean Air Act (CAA) 112 regulated flammable substances: No products were found.          Clean Air Act (CAA) 112 regulated toxic substances: No products were found.          OSHA: No Products were found.</p>
<b>WHMIS (Canada):</b>	N/A

## **SECTION 16: Other Information**

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*