MSDS - Material Safety Data Sheet

Section 1.	**Product and Company Identification**	
Supplier	CovaChem, LLC.	
	6260 East Riverside Blvd, STE 119	
	Loves Park, IL 61111	
	Phone: +1.815.315.1271 x3	
	Fax: +1.815.315.1272	
Emergency Phone #:	+1.815.714.8421	
Product Number	11202-10x1, 11202-25, 11202-custom	
Product Name	LCMS Grade Formic Acid	
Section 2.	**Composition / Information on Ingredients**	
OSHA Hazards	Corrosive	
	Corrosive	
HMIS Classification	Health Hazard	3
	Flammability	2
	Physical Hazard	0
NFPA Rating	Health Hazard	3
	Flammability	2
	Physical Hazard	0
Potential Health Effects	Inhalation	May be harmful if inhaled. May cause respiratory irritation.
	Skin	May be harmful if absorbed through the skin.
	Eyes	May cause irritation to the eyes.
	Ingestion	May be harmful if ingested.
Section 3.	**Hazards Identification**	
Synonyms	Formic acid; ethanoic acid	
Molecular Weight	64-18-6	
Formula	CH2O2	
Section 4.	**First Aid Measures**	
If Inhaled	Move to fresh air. Give artificial respiration if breathing has ceased.	
In case of Skin Contact	Remove affected clothes immediately. Wash with soap and water.	
In Case of Eye Contact	Flush with plenty of water. Seek medical attention promptly.	
If Swallowed	Do not induce vomitting. Rinse mouth with water and seek medical attention promptly.	
Section 5.	**Fire-Fighting Measures**	
Conditions for flammability	Avoid spark formation potential. Flammable liquid may ignite in presence of sparks, flame or high temperatures.	
Suitable Extinguishing Media	Water, dry chemical, alcohol resistant foam are all suitable.	
Protective Equipment	If needed, wear self contained breathing apparatus.	
Hazardous Combustion Products	Carbon oxides may form upon combustion	
Section 6.	**Accidental Release Measures**	
Personal Precautions	Avoid breathing dust or vapors. Use in well ventilated area.	
Environmental precautions	Prevent environmental release. Do not pour down drain.	
Section 7.	**Handling and Storage**	
Conditions for Safe Storage	Store container in a well ventilated, dry location. Store at 4 ^{o}C.	
Precautions regarding safe handling	Provide adequate ventilation and standard fire prevention measures.	
Section 8.	**Exposure Controls / Personal Protection**	
Does not contain any substance with occupational exposure limit values.		
Respiratory Protection	Use of an air purifying respiratory is recommended, type N100 or type P3 (EN 143).	
Hand Protection	Handle with nitrile rubber gloves.	
Eye Protection	Use a face shield and safety glasses.	
Body and Skin Protection	Complete chemical protective suit is recommended. The personal protective equipment should be selected depending upon the concentration and amount of chemical at work station.	
Hygiene	Wash hands and arms after use, prior to eating, and before breaks. Always use good industrial hygiene and safety practices.	
Section 9.	**Physical and Chemical Properties**	
Form	white solid	
Melting Point	8.5 ^{o}C	
Boiling Point	100.8 ^{o}C	
Flash Point	48 ^{o}C (closed cup method)	
Ignition Temperature	540 ^{o}C	
Autoignition Temperature	unavailable	
Density	1.20 g/mL	
Water Solubility	soluble	
Partition Coeff: n-octanol/water	log POW = -0.54	
Section 10.	**Stability and Reactivity**	
Chemical Stability	Stable under recommended storage conditions.	
Possibility of hazardous reactions	unavailable	
Conditions to Avoid	Do not expose to moisture	
Materials to Avoid	Strong Oxidizers, Pulverized or ground up metals, Strong bases	

Hazardous decomposition products	Carbon oxides may form upon combustion
Section 11.	**Toxicology**
Oral LD50	LD50 Oral - rat - 1,100 mg/kg
Inhalation LC50	data unavailable
Dermal LD50	data unavailable
Skin corrosion / irritation	severe eye irritant
Eye Damage or Irritation	severe eye irritant
Skin and Respiratory Sensitization	Sensitization agent
Germ Cell Mutagenicity	data unavailable
Carcinogeneity	
IARC	No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by ACGIH.
NTP	No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by NTP.
OSHA	No component present at greater than 0.1% is identified as a probable, possible or confirmed human carcinogen by OSHA.
Reproductive Toxicity	data unavailable
Teratogenicity	data unavailable
Aspiration Hazard	data unavailable
Potential Health Effects	
Inhalation	May be harmful if inhaled. Material is damaging to mucous membranes and upper respiratory tract.
Ingestion	May cause harm if swallowed.
Skin	May cause harm if absorbed.through skin.
Eyes	May cause eye irritation and burns.
Section 12.	**Ecological Information**
Toxicology	data unavailable
Persistence and degradability	data unavailable
Bioaccumulative potential	data unavailable
Mobility in soil	data unavailable
PBT and vPvB assessment	data unavailable
Other Adverse effects	data unavailable
Section 13.	**Disposal Consideration**
Disposal Considerations	Generation of waste should be kept to a minimum when possible. Any waste generated should be recycled when posslible. Please dispose any unused or used materials in accordance with applicable national, regional and local laws and regulations.
Section 14.	**Transportation Information**
DOT (USA)	
UN Number: 1779 Packing Group: II Class: 8 (3)	
Shipping Name: Formic Acid	
Poison Inhalation Hazard: No	Marine Pollutant: No
IMDG	
UN Number: 1779 Packing Group: II Class: 8 (3)	
Shipping Name: Formic Acid	
Marine Pollutant: No	
IATA	
UN Number: 1779 Packing Group: II Class: 8 (3)	
Shipping Name: Formic Acid	
Section 15.	**Regulatory Information**
OSHA Hazards	Corrosive liquid, Harmful if ingested, Combustible liquid
SARA 302 Components	No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302.
SARA 311/312	Health Hazard, Fire Hazard
Californial Prop. 65 Components	This material does not contain any chemicals known to the State of California to cause reproductive harm or birth defects.
Right to Know Components	Formic acid (CAS# 64-18-6)
Section 16.	**Other Information**
Other Information	The information represented in this MSDS is believed to be correct and is based on the current state of our knowledge. This document or any other document does not represent or suggest any type of warantee or guarantee of the product properties or characteristics of this material. CovaChem, LLC and its affiliates shall not be held liable for any damages that result from contact