

## sodium formate 141-53-7 MSDS

Name:	Formic acid sodium salt Material Safety Data Sheet
Synonym:	Sodium formate
CAS:	141-53-7

### Section 1 - Chemical Product

MSDS Name:Formic acid sodium salt Material Safety Data Sheet

Synonym:Sodium formate

### Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
141-53-7	Sodium formate	99	205-488-0

Hazard Symbols: XI

Risk Phrases: 36/37/38

### Section 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

Low hazard for usual industrial handling.

Inhalation:

Causes respiratory tract irritation.

Chronic:

Chronic absorption of formic acid may cause damage to the kidneys, which is indicated by albuminuria and hematuria. Chronic skin contact may cause sensitization dermatitis, particularly in workers previously sensitized to formaldehyde.

### Section 4 - FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin:

In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

## **Section 5 - FIRE FIGHTING MEASURES**

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

## **Section 6 - ACCIDENTAL RELEASE MEASURES**

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## **Section 7 - HANDLING and STORAGE**

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

## **Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 141-53-7: Personal Protective Equipment Eyes: 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.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

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.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Crystalline powder

Color: white

Odor: formic acid-like, weak odor

pH: 7-8.5 (5% aq soln)

Vapor Pressure: Negligible.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 253-261 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: N/A

Explosion Limits, upper: N/A

Decomposition Temperature: > 350 deg C

Solubility in water: Soluble.

Specific Gravity/Density: 1.92

Molecular Formula: CHO<sub>2</sub>Na

Molecular Weight: 68.01

## **Section 10 - STABILITY AND REACTIVITY**

Chemical Stability:

Stable under normal temperatures and pressures. Deliquescent (tending to absorb atmospheric water vapor and become liquid).

Conditions to Avoid:

High temperatures, moisture.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong acids.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, hydrogen gas, sodium oxide, sodium oxalate, sodium carbonate.

Hazardous Polymerization: Has not been reported.

## **Section 11 - TOXICOLOGICAL INFORMATION**

RTECS#:

CAS# 141-53-7: LR0350000 LD50/LC50:

CAS# 141-53-7: Oral, mouse: LD50 = 11200 mg/kg.

Carcinogenicity:

Sodium formate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

## **Section 12 - ECOLOGICAL INFORMATION**

### **Section 13 - DISPOSAL CONSIDERATIONS**

Dispose of in a manner consistent with federal, state, and local regulations.

### **Section 14 - TRANSPORT INFORMATION**

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

### **Section 15 - REGULATORY INFORMATION**

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system  
and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately  
with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face  
protection.

WGK (Water Danger/Protection)

CAS# 141-53-7: 1

Canada

CAS# 141-53-7 is listed on Canada's DSL List.

CAS# 141-53-7 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 141-53-7 is listed on the TSCA inventory.

### **SECTION 16 - ADDITIONAL INFORMATION**

N/A