

Issue Date 15-Apr-2015

Revision Date 16-Jun-2015

Version 2

**1. IDENTIFICATION**

**Product identifier**

**Product Name** Formic Acid 96%, ACS

**Other means of identification**

**Product Code** 3504

**UN/ID no.** UN1779

**Synonyms** Acid; Hydrogen Carboxylic Acid; Formylic Acid

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Laboratory chemicals.

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

Harrell Industries, Inc.  
2495 Commerce Drive  
Rock Hill, SC 29730

[www.harrellindustries.com](http://www.harrellindustries.com)

**Emergency telephone number**

**Company Phone Number** 803-327-6335

**Fax Number** 803-327-7808

**24 Hour Emergency Phone Number** 800 633-8253 (PERS)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Category 4

**Label elements**

**Emergency Overview**

**Danger**

Combustible liquid



DANGER! CORROSIVE LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED; MAY CAUSE LUNG DAMAGE. VAPOR IS IRRITATING TO EYES AND RESPIRATORY TRACT. FLAMMABLE LIQUID AND VAPOR.

**Appearance** Clear, colorless liquid

**Physical state** liquid

**Odor** Characteristic, pungent odor

**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Wear protective gloves/protective clothing/eye protection/face protection

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Not applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance****Synonyms****Formula**

Acid; Hydrogen Carboxylic Acid; Formylic Acid.

HCO<sub>2</sub>H

**4. FIRST AID MEASURES****Description of first aid measures**

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician if irritation occurs.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Wash contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	POISON! Give individual 1-2 glasses of water to drink. Do not induce vomiting unless directed by a doctor or poison control. Seek medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

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

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No information available.

**Explosion data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Sulfuric acids. furfuryl alcohol. hydrogen peroxide. Strong oxidizers. Bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** No special technical protective measures are necessary.

**Skin and body protection** No special technical protective measures are necessary.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	Characteristic, pungent odor
<b>Appearance</b>	Clear, colorless liquid	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	No information available		
<b>Melting point / freezing point</b>	No information available		
<b>Boiling point / boiling range</b>	No information available		
<b>Flash point</b>	68 °C		
<b>Evaporation rate</b>	No information available		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	No information available		
<b>Vapor density</b>	No information available		
<b>Relative density</b>	No information available		
<b>Water solubility</b>	No information available		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	No information available		
<b>Oxidizing properties</b>	No information available		

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames, ignition sources and incompatibles.

**Incompatible materials**

Sulfuric acids. furfuryl alcohol. hydrogen peroxide. Strong oxidizers. Bases.

**Hazardous Decomposition Products**

Carbon dioxide and carbon monoxide may form when heated to decomposition. Dehydrated by sulfuric acid to produce carbon monoxide.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Product Information</b>	No data available
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Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization  
 Germ cell mutagenicity  
 Carcinogenicity  
 Reproductive toxicity  
 STOT - single exposure  
 STOT - repeated exposure  
 Aspiration hazard

**Numerical measures of toxicity - Product Information**

<b>12. ECOLOGICAL INFORMATION</b>
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**Ecotoxicity**

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability****Bioaccumulation**

**Other adverse effects** No information available

<b>13. DISPOSAL CONSIDERATIONS</b>
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**Waste treatment methods**

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

<b>14. TRANSPORT INFORMATION</b>
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<b><u>DOT</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary class</b>	(3),

<b>Packing Group</b>	II
<b>Reportable Quantity (RQ)</b>	5000 lbs (2270 kg)
<b><u>TDG</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary class</b>	(3),
<b>Packing Group</b>	II
<b><u>MEX</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary class</b>	(3),
<b>Packing Group</b>	II
<b><u>ICAO (air)</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary hazard class</b>	(3),
<b>Packing Group</b>	II
<b><u>IATA</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary hazard class</b>	(3),
<b>Packing Group</b>	II
<b><u>IMDG</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Subsidiary hazard class</b>	(3),
<b>Packing Group</b>	II
<b><u>RID</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b><u>ADR</u></b>	Regulated
<b>UN/ID no.</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b><u>ADN</u></b>	Regulated
<b>UN Number</b>	UN1779
<b>Proper shipping name</b>	Formic Acid
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

#### CERCLA

### US State Regulations

#### California Proposition 65

#### U.S. State Right-to-Know Regulations

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<u>NFPA</u>	Health hazards 3	Flammability 2	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 3	Flammability 2	Physical hazards 0	Personal protection X

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#### Revision Note

No information available

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet