Safety Data Sheet

The Natural Choice for Flavor and Fragrance Ingredients

HEALTH	3
FLAMMABILITY	2
REACTIVITY	0

Section 1: IDENTIFICATION

Product Name:	**Pyruvic Acid, Natural**
Product Number:	**0297000**
Recommended Use:	Flavorings
Manufacturer:	Aurochemicals 7 Nicoll Street Washingtonville, NY 10992- USA 845-496-6065 845-496-6248 Fax
Emergency Telephone No.:	1-800-535-5053 (International 1-352-323-3500 collect)

Section 2: HAZARD(s) IDENTIFICATION

OSHA Hazards: Combustible Liquid, Corrosive

GHS Classification:
Flammable Liquids (Category 4)
Skin irritation (Category 1B)
Serious eye damage(Category 1)

Pictogram or written description:

Signal Word: **DANGER**

Hazard Statement:

H227	Combustible Liquid
H314	Causes severe skin burns and eye damage

Precautionary Statement

P280	Wear protective gloves/protective clothing/eye and face protection
P305+	IF IN EYES: Rinse cautiously with water for several minutes,
P351+	Remove contact lenses if present and easy to do.
P338	Continue rinsing
P310	Immediately call a POISON ENTER or doctor/physician

HMIS Classification

Health Hazard	3
Flammability	2
Physical Hazards	0

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Component	Pyruvic Acid
Common Name:	Pyruvic Acid
Synonyms:	2-Oxo-propionic acid; α-Ketopropionic Acid

CAS #	127-17-3
EC#	204-824-3
Formula	$C_3H_4O_3$
Molecular Weight	88.06 g/mol

Section 4: FIRST AID MEASURES

General Advise:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Contact with eyes:	Rinse thoroughly with plenty of water for at least 15 minutes and seek medical advice. Continue rinsing eyes during transport to the hospital.
Contact with skin:	Remove contaminated clothing. Rinse skin with cool water then wash with mild soap and warm water. Consult a physician.
Inhalation:	Provide fresh air, Consult a physician.
Ingestion:	DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water, seek medical advice, show this container or label to attending physician.
Clothing contamination:	Remove contaminated clothing and wash before reuse.

Section 5: FIREFIGHTING MEASURES

Suitable extinguishing media	For small (incipient) fires, use media such as alcohol foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all containers with flooding quantities of water.
Special Firefighting Procedures:	Do not stay in danger zone without self contained breathing apparatus. Prevent fire-fighting water from entering surface or ground water Cool unopened containers with water spray from a safe distance.
Other Information	Hazardous decomposition products formed under fire conditions – Carbon oxides

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal precautions	Evacuate personnel to safe areas. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental-protected measures	Prevent further leakage or spillage if safe to do so. Do not allow to enter drains or sewage system.
Procedures for cleaning / absorption	Take up with liquid absorbent material. Place in appropriate container and keep closed until disposal.
Ventilate area	After clean up, wash spill area and ventilate the area well.

Section 7: HANDLING AND STORAGE

Precautions for safe handling	Avoid inhalation of vapor or mist. Use explosion proof equipment. Keep away from sources of ignition-No smoking. Take measures to prevent the buildup of electrostatic charge.
Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 2-8^{o}C. Store under inert gas.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:	Contains no substances with occupational exposure limit values.
Personal Protective Equipment:	**These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. They should not be construed as offering an approval for any specific use scenario.**
Body Protection:	Complete suite protecting against chemicals, made of flame retardant antistatic material should be selected specifically for the work place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
Respiratory Protection:	Required when vapors / aerosols are generated.
Eye Protection:	Wear appropriate tightly fitting safety goggles. Face shield (8-inch minimum) NIOSH tested and approved.
Hand Protection:	Wear chemically resistant gloves of Nitrile rubber.
Industrial Hygiene:	Handle in accordance with good industrial hygiene and safety practice. Change contaminated clothing and wash before reuse. Wash hands after working with product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid, viscous
Color:	Colorless to pale yellow (The acid darkens upon exposure to light and air)
Odor:	Sour
Boiling Point:	164^{o}C
Flashpoint:	82^{o}C
Melting Point	12-14^{o}C
Ignition temperature	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Vapor Pressure:	No data available
Specific Gravity @ 25^{o}C:	1.260-1.281
Solubility:	Miscible with water, alcohol and oils
Partition coefficient: n-octanol/water	No data available

Section 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	Heat, Flames and Sparks, Air, Light.
Materials to avoid	Bases. Oxidizing agents, Reducing agents
Hazardous decomposition products:	Fumes formed under fire conditions – carbon oxides
Further information	No data available

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
LD50, Oral	No data available
LC50 Inhalation	No data available
LD50 Dermal	No data available
Other information on acute toxicity	LD50 Subcutaneous – Mouse-3,533 mg.kg
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available

Carcinogenicity

IARC	No component of this product, present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product, present levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No component of this product, present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No component of this product, present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity	No data available
Teratogenicity	No data available
Specific target organ toxicity-single exposure (GHS)	No data available
Specific target organ toxicity-repeated exposures (GHS)	No data available
Aspiration Hazards	No data available

Potential Health effects

Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	May be harmful if swallowed
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.

Signs and Symptoms of Exposure

Material is extremely destruction to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, Shortness of breath, Headache, Nausea.

Synergistic effects	No data available
RTECS:	UZ0829800

Section 12: ECOLOGICAL INFORMATION

Toxicity	
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	No data available
Other adverse effects	No data available

Section 13: DISPOSAL CONSIDERATIONS

Product:	According to local regulations
Packaging:	According to local regulations

Section 14: TRANSPORT INFORMATION

DOT (US)		UN 3265 Class 8 Packing Group II
	Proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (Pyruvic Acid)
	Reportable Quantity (RQ)	
	Marine pollutant	No
	Poison Inhalation Hazard	No
IMDG-Classification		UN 3265 Class 8 Packing Group II EMS-No.: F-A S-B
	Proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Pyruvic acid)
	Marine pollutant	No
IATA-Classification		UN 1274 Class 8 Packing Group II
	Proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (Pyruvic Acid)

Section 15: REGULATORY INFORMATION

OSHA Hazards	Combustible Liquid, Corrosive
SARA 302 Components	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards	Fire Hazard, Acute Health Hazard, Chronic Health Hazard.
Massachusetts Right to Know components	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know components	Pyruvic Acid CAS# 127-17-3 Rev. Date:

New Jersey Right to Know components	Pyruvic Acid	CAS# 127-17-3	Rev. Date:
California Prop. 65 components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.		

Section 16: OTHER INFORMATION

Aurochemicals provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Aurochemicals makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Aurochemicals will not be responsible, nor held liable, for damages resulting from use of or reliance upon this information.

Issued by:	**Contact Person:**
Aurochemicals	Deo N. Persaud
7 Nicoll Street	8/18/2022
Washingtonville, NY 10992 USA	