

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

## 1 Identification

- **Product identifier**
- **Trade name:** *Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)*
- **Article number:** SPX834
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson sherman@aquasolutions.org
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

*Flam. Liq. 2 H225 Highly flammable liquid and vapor.*

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

- **Signal word** *Danger*
- **Hazard statements**  
*Highly flammable liquid and vapor.*
- **Precautionary statements**  
*Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*  
*Keep container tightly closed.*  
*Ground/bond container and receiving equipment.*  
*Use explosion-proof electrical/ventilating/lighting/equipment.*  
*Use only non-sparking tools.*  
*Take precautionary measures against static discharge.*  
*Wear protective gloves/protective clothing/eye protection/face protection.*  
*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*  
*In case of fire: Use for extinction: CO2, powder or water spray.*  
*Store in a well-ventilated place. Keep cool.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)

(Contd. of page 1)

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 67-63-0	Isopropanol	8.026%
CAS: 79-31-2	Isobutyric Acid	0.102%
CAS: 107-92-6	butyric acid	0.102%
CAS: 503-74-2	isovaleric acid	0.102%
CAS: 646-07-1	4-Methylpentanoic acid	0.102%

- **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	91.054%
CAS: 64-19-7	Acetic Acid	0.102%
CAS: 79-09-4	Propionic Acid, Reagent Grade	0.102%
CAS: 109-52-4	valeric acid	0.102%
CAS: 111-14-8	heptanoic acid	0.102%
CAS: 142-62-1	hexanoic acid	0.102%

### 4 First-aid measures

- **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Immediately rinse with water.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 2)

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 67-63-0	Isopropanol	400 ppm
CAS: 64-19-7	Acetic Acid	5 ppm
CAS: 79-09-4	Propionic Acid, Reagent Grade	15 ppm
CAS: 79-31-2	Isobutyric Acid	0.23 ppm
CAS: 107-92-6	butyric acid	1.4 ppm
CAS: 109-52-4	valeric acid	2.2 mg/m <sup>3</sup>
CAS: 111-14-8	heptanoic acid	3.9 ppm
CAS: 142-62-1	hexanoic acid	2.2 mg/m <sup>3</sup>

- **PAC-2:**

CAS: 67-63-0	Isopropanol	2000* ppm
CAS: 64-19-7	Acetic Acid	35 ppm
CAS: 79-09-4	Propionic Acid, Reagent Grade	28 ppm
CAS: 79-31-2	Isobutyric Acid	2.6 ppm
CAS: 107-92-6	butyric acid	16 ppm
CAS: 109-52-4	valeric acid	24 mg/m <sup>3</sup>
CAS: 111-14-8	heptanoic acid	43 ppm
CAS: 142-62-1	hexanoic acid	24 mg/m <sup>3</sup>

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 3)

· <b>PAC-3:</b>		
CAS: 67-63-0	Isopropanol	12000** ppm
CAS: 64-19-7	Acetic Acid	250 ppm
CAS: 79-09-4	Propionic Acid, Reagent Grade	170 ppm
CAS: 79-31-2	Isobutyric Acid	15 ppm
CAS: 107-92-6	butyric acid	110 ppm
CAS: 109-52-4	valeric acid	140 mg/m <sup>3</sup>
CAS: 111-14-8	heptanoic acid	260 ppm
CAS: 142-62-1	hexanoic acid	140 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

<b>CAS: 67-63-0 Isopropanol</b>	
PEL	Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
REL	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm Long-term value: 492 mg/m <sup>3</sup> , 200 ppm BEI

- **Ingredients with biological limit values:**

<b>CAS: 67-63-0 Isopropanol</b>	
BEI	40 mg/L LD50 Intraperitoneal: urine Time: end of shift at end of workweek LD50: Acetone (background, nonspecific)

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 4)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: Clear

· **Odor:** Alcohol

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 82 °C (179.6 °F)

· **Flash point:** 13 °C (55.4 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 425 °C (797 °F)

· **Decomposition temperature:** Not determined.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 5)

· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C (68 °F):</b>	23 hPa (17.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.97805 g/cm <sup>3</sup> (8.16183 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	8.1 %
<b>Water:</b>	91.1 %
· <b>VOC content:</b>	8.13 %
	79.5 g/l / 0.66 lb/gal
· <b>Solids content:</b>	0.1 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimate)**

Oral	LD50	97,847 mg/kg
Dermal	LD50	118,205 mg/kg
Inhalative	LC50/4h	>394 mg/l

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 6)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

CAS: 67-63-0 Isopropanol	3
--------------------------	---

- **NTP (National Toxicology Program)**

None of the ingredients is listed.
------------------------------------

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.
------------------------------------

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 1 (Self-assessment): slightly hazardous for water  
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |                                  |   |
|----------------------------------|---|
| · <b>UN-Number</b>               |   |
| · <b>DOT, IMDG, IATA</b>         | UN1993                                  |
| · <b>UN proper shipping name</b> |   |
| · <b>DOT</b>                     | Flammable liquids, n.o.s. (Isopropanol) |
| · <b>IMDG, IATA</b>              | FLAMMABLE LIQUID, N.O.S. (Isopropanol)  |

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)

(Contd. of page 7)

· **Transport hazard class(es)**· **DOT**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **IMDG, IATA**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **Packing group**· **DOT, IMDG, IATA** II· **Environmental hazards:** Not applicable.· **Special precautions for user** Warning: Flammable liquids· **Hazard identification number (Kemler code):** 33· **EMS Number:** F-E,S-D· **Stowage Category** B

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 5 L  
 On cargo aircraft only: 60 L

· **IMDG**· **Limited quantities (LQ)** 5L· **Excepted quantities (EQ)** Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL), 3, II

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

CAS: 67-63-0 | Isopropanol

(Contd. on page 9)

US



# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 8)

<b>· TSCA (Toxic Substances Control Act):</b>	
Water	ACTIVE
Isopropanol	ACTIVE
Acetic Acid	ACTIVE
Propionic Acid, Reagent Grade	ACTIVE
Isobutyric Acid	ACTIVE
butyric acid	ACTIVE
valeric acid	ACTIVE
heptanoic acid	ACTIVE
hexanoic acid	ACTIVE
isovaleric acid	ACTIVE
4-Methylpentanoic acid	ACTIVE

**· Hazardous Air Pollutants**  
None of the ingredients is listed.

**· Proposition 65**  
**· Chemicals known to cause cancer:**  
None of the ingredients is listed.

**· Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients is listed.

**· Chemicals known to cause reproductive toxicity for males:**  
None of the ingredients is listed.

**· Chemicals known to cause developmental toxicity:**  
None of the ingredients is listed.

**· Carcinogenic categories**  
**· EPA (Environmental Protection Agency)**  
None of the ingredients is listed.

**· TLV (Threshold Limit Value)**  
CAS: 67-63-0 Isopropanol A4

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**  
None of the ingredients is listed.

**· GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).  
**· Hazard pictograms**



GHS02

- Signal word** Danger
- Hazard statements**  
Highly flammable liquid and vapor.
- Precautionary statements**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix 1000 mg/L in 10% v/v IPA (Second Source)**

(Contd. of page 9)

*Use only non-sparking tools.*

*Take precautionary measures against static discharge.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing SDS:** Environment protection department.

· **Contact:**

· **Date of preparation / last revision** 03/12/2021 / -

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*BEI: Biological Exposure Limit*

*Flam. Liq. 2: Flammable liquids – Category 2*