

# 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  
20.0 mg/L in 10% v/v IPA
- **Article number:** SPX833
- **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**  
20.0 mg/L in 10% v/v IPA

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



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



- **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%
--------------	-------------	--------

### · **Table of Nonhazardous Ingredients**

CAS: 7732-18-5	Water	91.958%
CAS: 64-19-7	Acetic Acid	0.002%
CAS: 79-09-4	Propionic Acid, Reagent Grade	0.002%
CAS: 79-31-2	Isobutyric Acid	0.002%
CAS: 107-92-6	butyric acid	0.002%
CAS: 109-52-4	valeric acid	0.002%
CAS: 111-14-8	heptanoic acid	0.002%
CAS: 503-74-2	isovaleric acid	0.002%
CAS: 646-07-1	4-Methylpentanoic acid	0.002%
CAS: 142-62-1	hexanoic acid	0.0002%

## 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)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix**  
20.0 mg/L in 10% v/v IPA

(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**  
20.0 mg/L in 10% v/v IPA

(Contd. of page 3)

· PAC-3:		
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:**

**CAS: 67-63-0 Isopropanol**

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:**

**CAS: 67-63-0 Isopropanol**

BEI	40 mg/L LD50 Intraperitoneal: urine Time: end of shift at end of workweek LD50: Acetone (background, nonspecific)
-----	--

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

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix**  
20.0 mg/L in 10% v/v IPA

(Contd. of page 4)

- **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:**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Alcohol
<b>Odor threshold:</b>	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	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**  
20.0 mg/L in 10% v/v IPA

(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>	8.0 %
<b>Water:</b>	92.0 %
<b>VOC content:</b>	8.03 %
	78.5 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:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

(Contd. on page 7)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix**  
20.0 mg/L in 10% v/v IPA

(Contd. of page 6)

· **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

· **UN-Number**

· **DOT, IMDG, IATA**

UN1993

· **UN proper shipping name**

· **DOT**

Flammable liquids, n.o.s. (Isopropanol)

· **IMDG, IATA**

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**  
20.0 mg/L in 10% v/v IPA

(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.

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 03/12/2021

Reviewed on 02/25/2021

**Trade name: Carboxylic Acid Mix**  
20.0 mg/L in 10% v/v IPA

(Contd. of page 8)

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

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

· **TSCA (Toxic Substances Control Act):**

Water	ACTIVE
Isopropanol	ACTIVE
Acetic Acid	ACTIVE
Propionic Acid, Reagent Grade	ACTIVE
Isobutyric Acid	ACTIVE
butyric acid	ACTIVE
valeric acid	ACTIVE
heptanoic acid	ACTIVE
isovaleric acid	ACTIVE
4-Methylpentanoic acid	ACTIVE
hexanoic 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.

(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**  
**20.0 mg/L in 10% v/v IPA**

(Contd. of page 9)

- **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: 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**

*Revision 0.0, 03-12-2021 Creation date for SDS. STN*

*03/12/2021 / 1.0*

- **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)*

*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*

- **\* Data compared to the previous version altered.**