

# Tri San Acid Sanitizer

# SAFETY DATA SHEET

Preparation Date: 15-Nov-2007

Revision Date: 14-Mar-2017

Revision Number: 4

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product Identifier****Product Name** Tri San Acid Sanitizer**Other means of identification****Item#:** 1918**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** Food contact no rinse sanitizer, Restricted to professional users**Uses advised against** All other**Details of the supplier of the safety data sheet****Supplier** DeLaval Manufacturing  
11100 N. Congress Ave.  
Kansas City, MO 64153  
Tel: 816-891-7700, 8am – 5pm M-F**Emergency Telephone Number**

Chemtrec 1-800-424-9300

**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

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

Skin Corrosion/Irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3

Sulfuric acid and other mineral acids mist statement

The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric or other strong mineral acids (such as Hydrochloric and Nitric acid) as a known human carcinogen, (IARC category 1). This classification applies only to mists containing such mineral acids and not to the specific acids or their solutions, unless otherwise noted.

**Label Elements****Emergency Overview****DANGER****Hazard Statements**

Causes severe skin burns and eye damage

May cause cancer

May cause respiratory irritation. May cause drowsiness or dizziness



**Appearance** Clear, Colorless to Light yellow

**Physical state** Liquid

**Odor** Pungent

#### Precautionary Statements - Prevention

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Use only outdoors or in a well-ventilated area

#### Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

#### Precautionary Statements - Storage

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Propionic acid	79-09-4	10.0
Capric acid / Decanoic acid	334-48-5	3.0
Pelargonic acid / Nonanoic acid	112-05-0	3.0
Phosphoric acid	7664-38-2	8.5
Sulfuric acid	7664-93-9	9.5

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of first-aid measures

##### Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

##### Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

<b>Inhalation</b>	Move to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

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

Corrosive. The product causes burns of eyes, skin and mucous membranes.

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

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**

No information available.

**Specific hazards arising from the chemical**

The product causes burns of eyes, skin and mucous membranes.

**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.

**NFPA**                      **Health hazards** 3                      **Flammability** 0                      **Instability** 1

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so.

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

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

**Handling**                      Avoid contact with skin, eyes and clothing.

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

**Storage**                      Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Incompatible Materials**                      bases, organic materials, light metals (e.g. aluminum, copper, brass, zinc galvanized)

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Propionic acid 79-09-4	TWA: 10 ppm	TWA: 10 ppm TWA: 30 mg/m <sup>3</sup>	-
Phosphoric acid 7664-38-2	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	1000 mg/m <sup>3</sup>
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

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

- Eye/face Protection** Safety glasses with side-shields.
- Skin and body protection** Wear protective gloves and protective clothing.
- Respiratory Protection** In case of inadequate ventilation wear respiratory protection.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Pungent
<b>Appearance</b>	Clear, Colorless to Light yellow	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	No information available	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Specific Gravity	1.16	
Water Solubility	soluble	
Partition coefficient: n-octanol/water	No information available	
Autoignition Temperature	No information available	
Decomposition temperature	No information available	
Viscosity of Product	No information available	

**Other information**

**Density** No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

May react with other chemicals. Do not mix with other chemicals except as directed on label.

**Chemical Stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

Gives off hydrogen by reaction with some metals (e.g. aluminum).

**Conditions to Avoid**

Extremes of temperature and direct sunlight.

**Incompatible Materials**

bases, organic materials, light metals (e.g. aluminum, copper, brass, zinc galvanized)

**Hazardous decomposition products**

None known.

**11. TOXICOLOGICAL INFORMATION****Principal Routes of Exposure** Eye contact, Skin contact, Ingestion**Information on likely routes of exposure****Eyes** Corrosive to the eyes and may cause severe damage including blindness.**Skin** Extremely corrosive and destructive to tissue.**Ingestion** Ingestion causes burns of the upper digestive and respiratory tracts.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** Product is not identified as a sensitizer according to OSHA regulations.**Mutagenic effects** Product is not identified as a mutagen according to OSHA regulations.**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulfuric acid 7664-93-9	A2	Group 1	Known	X

*ACGIH (American Conference of Governmental Industrial Hygienists)**A2 - Suspected Human Carcinogen**IARC (International Agency for Research on Cancer)**Group 1 - Carcinogenic to Humans*

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**Reproductive Effects** Product is not identified as having reproductive effects according to OSHA regulations.  
**STOT - single exposure** Product is not identified as having single target organ toxicity (single exposure) according to OSHA regulations.

**STOT - repeated exposure** Product is not identified as having single target organ toxicity (repeated exposure) according to OSHA regulations.

**Aspiration Hazard** Product is not identified as an aspiration hazard according to OSHA regulations.

**Numerical measures of toxicity**

If available, toxicity values of individual components are shown below.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propionic acid 79-09-4	= 2600 mg/kg ( Rat )	= 496 mg/kg ( Rabbit )	= 4650 ppm ( Rat ) 8 h
Capric acid / Decanoic acid 334-48-5	= 3320 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	No data available
Pelargonic acid / Nonanoic acid 112-05-0	= 5000 mg/kg ( Rat )	= 2000 mg/kg ( Rat )	No data available
Phosphoric acid 7664-38-2	= 1530 mg/kg ( Rat )	2730 mg/kg ( Rabbit )	850 mg/m <sup>3</sup> ( Rat ) 1 h
Sulfuric acid	= 2140 mg/kg ( Rat )	No data available	= 510 mg/m <sup>3</sup> ( Rat ) 2 h

7664-93-9			
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10.8% of the mixture consists of ingredient(s) of unknown toxicity

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

If available, ecotoxicity values of individual components are shown below.

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Propionic acid 79-09-4	45.8: 72 h Desmodesmus subspicatus mg/L EC50 43: 96 h Desmodesmus subspicatus mg/L EC50	1: 96 h Pimephales promelas mg/L LC50 static 73 - 99.7: 96 h Lepomis macrochirus mg/L LC50 static 51: 96 h Oncorhynchus mykiss mg/L LC50 static	EC50 = 59.6 mg/L 17 h	No data available
Capric acid / Decanoic acid 334-48-5	No data available	54: 96 h Oryzias latipes mg/L LC50 semi-static	EC50 = 11.2 mg/L 5 min EC50 = 9.0 mg/L 25 min EC50 = 9.31 mg/L 15 min	65: 24 h Daphnia magna mg/L EC50
Pelargonic acid / Nonanoic acid 112-05-0	No data available	93.4 - 115: 96 h Pimephales promelas mg/L LC50 flow-through 68 - 121: 96 h Oncorhynchus mykiss mg/L LC50 static 105: 96 h Lepomis macrochirus mg/L LC50 static	No data available	No data available
Phosphoric acid 7664-38-2	No data available	3 - 3.5: 96 h Gambusia affinis mg/L LC50	No data available	4.6: 12 h Daphnia magna mg/L EC50
Sulfuric acid 7664-93-9	No data available	LC50 42 mg/l 96 h	No data available	EC50 42.5 mg/L 48 h

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Waste Disposal Method** Dispose of in accordance with local regulations. Should not be released into the environment.

**Contaminated Packaging** Empty containers should be taken for local recycling, recovery or waste disposal.

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No** 3264  
**Proper Shipping Name** Corrosive liquid, acidic, inorganic, n.o.s ( Sulfuric acid, Propionic acid Solution )  
**Hazard Class** 8  
**Packing Group** II

## 15. REGULATORY INFORMATION

### State Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propionic acid 79-09-4	X	X	X
Phosphoric acid 7664-38-2	X	X	X
Sulfuric acid 7664-93-9	X	X	X

### U.S. EPA Label information

**EPA Pesticide registration number** 4959-41

### **EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

#### **EPA Pesticide label**

PRECAUTIONARY STATEMENT:

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER. CORROSIVE. Causes irreversible eye damage or skin burns. Harmful if swallowed, absorbed or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PHYSICAL AND CHEMICAL HAZARDS: Mix only with water following label directions. Do not mix with chlorinated cleaners or sanitizers. Toxic chlorine gas will be formed. Contact with soft metals may generate hydrogen gas.

PERSONAL PROTECTIVE EQUIPMENT (PPE): Applicators and handlers must wear coveralls over long-sleeved shirt and long pants, socks, and chemical-resistant footwear, goggles or face shield, and chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, PV, or viton).

ENVIRONMENTAL HAZARDS: This product is toxic to fish. Keep out of lakes, ponds, or streams. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

## 16. OTHER INFORMATION

**Preparation Date:** 15-Nov-2007

**Revision Date:** 14-Mar-2017

**Revision Note:** None

### 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 SDS**