



# Star San

## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : Star San  
EPA Registration #: 65001-1

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Sanitizer

#### 1.3. Supplier

**Manufacturer**  
Five Star Chemicals & Supply Inc  
6870 W 52nd Ave. Suite 205  
Arvada, CO 80002  
T (303)287-0186

#### 1.4. Emergency telephone number

Emergency number : 800-535-5035 (Infotrac)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin Corr. 1B  
Eye Dam. 1

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : Causes severe skin burns and eye damage  
Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash hands, forearms and face thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If swallowed: rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If inhaled: Remove person to fresh air and keep comfortable for breathing.  
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.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%
Phosphoric acid	(CAS-No.) 7664-38-2	50 – 60
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives	(CAS-No.) 85536-14-7	10 – 20

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.
- First-aid measures after skin contact : If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.
- First-aid measures after eye contact : 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.
- First-aid measures after ingestion : If swallowed: rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediately call a poison center or doctor/physician.

#### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : Causes burns to the respiratory system.
- Symptoms/effects after skin contact : Causes severe skin burns. Symptoms may include redness, pain, blisters.
- Symptoms/effects after eye contact : Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Symptoms/effects after ingestion : May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

#### 4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use water jet.

#### 5.2. Specific hazards arising from the chemical

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Oxides of phosphorus. May release toxic or corrosive products.

#### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

##### 6.1.1. For non-emergency personnel

No additional information available

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

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### 6.3. Methods and material for containment and cleaning up

- For containment : Stop leak if safe to do so. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Wear recommended personal protective equipment.
- Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Provide adequate ventilation.
- Hygiene measures : Wash contaminated clothing before reuse. Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Keep container tightly closed in a cool, well-ventilated place. Store in original container. Store locked up.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
IDLH	US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives (85536-14-7)		
Not applicable		

### 8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Wear suitable gloves resistant to chemical penetration.

#### Eye protection:

Wear eye/face protection

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid.
Color	: Amber
Odor	: No data available
Odor threshold	: No data available
pH	: 1.65
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.359
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials.

#### 10.5. Incompatible materials

Strong bases. Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Products of combustion may include, and are not limited to: oxides of carbon. Oxides of phosphorus. May release toxic or corrosive products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified.

Phosphoric acid (7664-38-2)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	2740 mg/kg

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<b>Phosphoric acid (7664-38-2)</b>	
ATE US (oral)	1530 mg/kg body weight
ATE US (dermal)	2740 mg/kg body weight
<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives (85536-14-7)</b>	
LD50 oral rat	1219 mg/kg
ATE US (oral)	1219 mg/kg body weight
Skin corrosion/irritation	: Causes severe skin burns. pH: 1.65
Serious eye damage/irritation	: Causes serious eye damage. pH: 1.65
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Causes burns to the respiratory system.
Symptoms/effects after skin contact	: Causes severe skin burns. Symptoms may include redness, pain, blisters.
Symptoms/effects after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

<b>Phosphoric acid (7664-38-2)</b>	
LC50 fish 1	75.1 mg/l
<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives (85536-14-7)</b>	
LC50 fish 1	5.6 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [flow-through])
EC50 Daphnia 1	5.2 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and degradability

<b>Star San</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>Star San</b>	
Bioaccumulative potential	Not established.
<b>Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives (85536-14-7)</b>	
Partition coefficient n-octanol/water	2 (at 23 °C)

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

ther information : No other effects known.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

UN-No.(DOT) : UN1760  
Proper Shipping Name (DOT) : Corrosive liquids, n.o.s. (Phosphoric acid and Dodecylbenzenesulfonic acid)  
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Packing group (DOT) : III  
Hazard labels (DOT) :



#### Transport by sea

Transport document description (IMDG) : UN 1760 CORROSIVE LIQUID, N.O.S., 8, III  
UN-No. (IMDG) : 1760  
Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S. (Phosphoric acid and Dodecylbenzenesulfonic acid)  
Class (IMDG) : 8 - Corrosive substances  
Packing group (IMDG) : III - substances presenting low danger  
Hazard labels (IMDG) :



#### Air transport

Transport document description (IATA) : UN 1760 Corrosive liquid, n.o.s., 8, III  
UN-No. (IATA) : 1760  
Proper Shipping Name (IATA) : Corrosive liquid, n.o.s. (Phosphoric acid and Dodecylbenzenesulfonic acid)  
Class (IATA) : 8 - Corrosives  
Packing group (IATA) : III - Minor Danger  
Hazard labels (IATA) :



### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

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.

#### DANGER:

Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear protective eyewear, clothing and rubber gloves. Harmful if swallowed or absorbed through skin or inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 15.2. International regulations

No additional information available

#### 15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

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### SECTION 16: Other information

Issue date	: 07/18/2019
Revision date	: 11/17/2020
Other information	: None.

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