

**SECTION 1 Identification****1.1. Product identifier**

Product form : Mixture  
Product name : T.K.O. SOUR  
Product code : 1072

**1.2. Other means of identification**

No additional information available

**1.3. Recommended use of the chemical and restrictions on use**

Use of the substance/mixture : Laundry sour  
Restrictions on use : For professional use only

**1.4. Supplier's details**

Christeyns North America, LLC  
311 Staton Road  
Greenville, NC 27834  
USA  
T 252-756-8616 / 800.869.6171  
[info@christeyns.us](mailto:info@christeyns.us) - [www.christeyns.com](http://www.christeyns.com)

**1.5. Emergency phone number**

Emergency number : VELOCITY EHS (800) 255-3924 (24 HOURS)  
(For use only in the event of emergencies involving a spill, leak, fire, exposure, or accident involving chemicals)

**SECTION 2 Hazard Identification****2.1. Classification of the substance or mixture****GHS US classification**

Serious eye damage/eye irritation, Category 2A H319 Causes serious eye irritation.  
Full text of H statements : see section 16

**2.2. Label elements****GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H319 - Causes serious eye irritation  
Precautionary statements (GHS US) : P264 - Wash hands, forearms and face thoroughly after handling.  
P280 - Wear eye protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice or attention.

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### SECTION 3 Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name        | Product identifier | %       |
|-------------|--------------------|---------|
| Citric acid | CAS-No.: 77-92-9   | 30 - 60 |

Full text of hazard classes and H-statements : see section 16

### SECTION 4 First aid measures

#### 4.1. Description of necessary first-aid measures

|                                       |                                                                                                                                                                  |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Treat symptomatically. Get medical attention if symptoms occur.                                 |
| First-aid measures after skin contact | : Rinse skin with plenty of water or shower. If irritation persists, get medical attention.                                                                      |
| First-aid measures after eye contact  | : Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical attention. |
| First-aid measures after ingestion    | : Rinse mouth with water if the person is conscious. Do not induce vomiting unless directed by medical personnel. Get medical attention if you feel unwell.      |

#### 4.2. Most important symptoms/effects, acute and delayed

|                                     |                                                                                             |
|-------------------------------------|---------------------------------------------------------------------------------------------|
| Symptoms/injuries after eye contact | : May cause moderate irritation, including burning sensation, tearing, redness or swelling. |
|-------------------------------------|---------------------------------------------------------------------------------------------|

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

### SECTION 5: Fire-fighting measures

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

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| Suitable extinguishing media | : Use extinguishing media appropriate for surrounding fire. |
|------------------------------|-------------------------------------------------------------|

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

|             |                                                     |
|-------------|-----------------------------------------------------|
| Fire hazard | : Decomposition products may include carbon oxides. |
|-------------|-----------------------------------------------------|

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

|                                |                                                                                                                                                                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Firefighting instructions      | : Use water spray or fog for cooling exposed containers. In case of fire, do not breathe fumes. Move containers from the fire area if you can do so without risk. Prevent firefighting water from entering the environment. |
| Protection during firefighting | : Wear a self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment.                                                                                                           |

### SECTION 6 Accidental release measures

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

##### For non-emergency personnel

|                      |                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment | : For spills or leaks, contact a supervisor and/or emergency responder. Avoid contact with spilled material and keep unnecessary personnel away. |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|

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### For emergency responders

|                           |                                                                                                                                                                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective equipment      | : See Section 8 for recommended personal protective equipment. Ventilate the area and restrict access to the spill or leak zone. Have emergency procedures in place for treating exposures or incidents. Only trained and authorized personnel equipped with proper protective equipment should perform cleanup. |
| Environmental precautions | : Avoid release onto the ground, into storm sewers, or bodies of water.                                                                                                                                                                                                                                          |

### 6.2. Methods and materials for containment and cleaning up

|                         |                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Methods for cleaning up | : Collect all waste in suitable, labeled, and closed containers. Dispose according to local registration (See Section 13). |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

|                               |                                                                                                                                                                                                                                                 |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling | : Handle in accordance with good industrial hygiene and safety practices. Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Use appropriate personal protection equipment (PPE). Wash thoroughly after handling. |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|                       |                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage conditions    | : Store upright in a tightly closed, suitably labeled container. Store in a dry, cool, well-ventilated area with appropriate designated containment measures. Keep out of reach of children. Have readily available spill kits with appropriate absorbent materials. Protect from sunlight. Store in original labeled containers. |
| Incompatible products | : Never mix with other materials.                                                                                                                                                                                                                                                                                                 |

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

|                                  |                                                                                                                                                                                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls | : Maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable guidelines, use only with adequate ventilation. Eye wash facilities and emergency showers must be available when handling this product. |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 8.3. Individual protection measures, such as personal protective equipment

|                                   |
|-----------------------------------|
| <b>Hand protection:</b>           |
| Chemical resistant PVC gloves     |
| <b>Eye protection:</b>            |
| Safety glasses with side shields. |

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

|                |         |
|----------------|---------|
| Physical state | : Solid |
| Color          | : White |

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|                                |                           |
|--------------------------------|---------------------------|
| Odor                           | : No data available       |
| Odor threshold                 | : No data available       |
| pH                             | : No data available       |
| Melting point                  | : No data available       |
| Freezing point                 | : No data available       |
| Boiling point                  | : No data available       |
| Flash point                    | : No data available       |
| Flammability (solid, gas)      | : No data available       |
| Vapor pressure                 | : No data available       |
| Relative vapor density at 20°C | : No data available       |
| Relative density               | : No data available       |
| Density                        | : 1.993 g/cm <sup>3</sup> |
| Solubility                     | : No data available       |
| Log Pow                        | : No data available       |
| Autoignition temperature       | : No data available       |
| Decomposition temperature      | : No data available       |
| Viscosity, kinematic           | : No data available       |
| Explosion limits               | : No data available       |
| Particle characteristics       | : No data available       |

### Citric acid

|                          |                   |
|--------------------------|-------------------|
| Particle characteristics | No data available |
|--------------------------|-------------------|

## 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

Not reactive under normal conditions of use, storage, and transport.

### 10.2. Chemical stability

Stable under recommended handling and storage conditions. Decomposes when overheated or exposed to strong oxidizers or acids/bases.

### 10.3. Possibility of hazardous reactions

No hazardous polymerization expected. Contact with incompatible materials (strong acids, alkalis, oxidizers) may cause degradation with release of vapors or mild exothermic reactions.

### 10.4. Conditions to avoid

Avoid excessive heat, open flames, and prolonged exposure to direct sunlight.

### 10.5. Incompatible materials

Incompatible with strong oxidizing agents, strong acids, and strong bases.

### 10.6. Hazardous decomposition products

Thermal decomposition may produce carbon oxides (CO, CO<sub>2</sub>) and minor irritating vapors.

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

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Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

### Citric acid (77-92-9)

|                 |                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------|
| LD50 oral rat   | 3000 mg/kg Source: OECD Screening Information Data Set                                                         |
| LD50 oral       | 5400 mg/kg body weight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 4500 - 6400 |
| LD50 dermal rat | > 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)                    |

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

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

### Citric acid (77-92-9)

|                          |                                    |
|--------------------------|------------------------------------|
| LOAEL (oral,rat,90 days) | 8000 mg/kg body weight Animal: rat |
| NOAEL (oral,rat,90 days) | 4000 mg/kg body weight Animal: rat |

Aspiration hazard : Not classified

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|                      |                   |
|----------------------|-------------------|
| Viscosity, kinematic | No data available |
|----------------------|-------------------|

### Citric acid (77-92-9)

|                      |                   |
|----------------------|-------------------|
| Viscosity, kinematic | No data available |
|----------------------|-------------------|

Symptoms/injuries after eye contact : May cause moderate irritation, including burning sensation, tearing, redness or swelling.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

### Citric acid (77-92-9)

|                                    |                                                              |
|------------------------------------|--------------------------------------------------------------|
| LC50 - Fish [1]                    | 48 mg/l Source: ECOTOX                                       |
| EC50 - Other aquatic organisms [1] | > 50 mg/l Test organisms (species): other aquatic crustacea: |

### 12.2. Persistence and degradability

### T.K.O. SOUR

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

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### Citric acid (77-92-9)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

### 12.3. Bioaccumulative potential

### Citric acid (77-92-9)

|         |                   |
|---------|-------------------|
| Log Pow | -1.7 Source: ICSC |
|---------|-------------------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13 Disposal considerations

|                              |                                                                                                                                                                     |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional legislation (waste) | : Avoid unauthorized disposal. Do not dump into any body of water. Comply with federal, state/provincial and local laws/regulations. Do not reuse empty containers. |
| Waste treatment methods      | : Do not allow the product to contaminate any body of water. Refer to Section 8 for personal protection equipment.                                                  |

## SECTION 14 Transport information

In accordance with DOT

### DOT

#### 14.1. UN number

Not regulated for transport

#### 14.2. Proper Shipping Name

Not regulated

#### 14.3. Transport hazard class(es)

Not regulated

#### 14.4. Packing group

Not regulated

#### 14.5. Environmental hazards

Not regulated

No supplementary information available

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

#### DOT

Not regulated

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### SECTION 15 Regulatory information

#### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

No additional information available

#### 15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 7/29/2026

Issue date : 2/17/2026

#### Full text of hazard classes and H-statements

|      |                               |
|------|-------------------------------|
| H319 | Causes serious eye irritation |
|------|-------------------------------|

Safety Data Sheet (SDS), USA ML

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.