Material Safety Data Sheet
p-Toluenesulfonic acid monohydrate

MSDS# 01968

Section 1 - Chemical Product and Company Identification

**MSDS Name:** p-Toluenesulfonic acid monohydrate  
**Product Grade:** SQ  
**Catalog Numbers:** 20795  
**Synonyms:** Toluene-4-sulfonic acid; PTSA

**Company Identification:**

- Fisher Scientific  
- Part of Thermo Fisher Scientific  
- Thermo Fisher Scientific India Pvt. Ltd  
- 403-404, B-wing, Delphi,  
- Hiranandani Business Park,  
- Powai (E), Mumbai 400076, INDIA.

**For information,** call: 022 – 6680 3001/2, **Call India Toll Free –** 1 800 209 7001  
**Emergency Number:** 022-66803004/14  
**For CHEMTREC assistance,** call: 800-424-9300 [International]  
**For International CHEMTREC assistance,** call: 703-527-3887 [International]

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6192-52-5</td>
<td>p-Toluenesulfonic acid monohydrate</td>
<td>96.5+</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Danger! Hygroscopic (absorbs moisture from the air). Causes burns by all exposure routes.  
Target Organs: Respiratory system, eyes, skin.

**Potential Health Effects**

Eye: Causes eye burns.  
Skin: Causes skin burns. May be harmful if absorbed through the skin.  
Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed.
Inhalation: Causes chemical burns to the respiratory tract. May be harmful if inhaled.
Chronic: No information found.

Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Notes to Physician:** Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** 180°C (356.00 deg F)

**Autoignition Temperature:** 350 °C (662.00 deg F)

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** health: 3; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.
Section 7 - Handling and Storage

**Handling:** Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACG</th>
<th>NIOS</th>
<th>OSHA - Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>p-Toluenesulfonic acid anhydrous</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>p-Toluenesulfonic acid monohydrate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** p-Toluenesulfonic acid anhydrous: None listed  p-Toluenesulfonic acid monohydrate: None listed

**Engineering Controls:**
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits**

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or respirators: European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
Section 9 - Physical and Chemical Properties

Physical State: Crystals  
Color: white to off-white - white to pink  
Odor: weak odor  
pH: Not applicable  
Vapor Pressure: Not available  
Evaporation Rate: Not applicable.  
Viscosity: Not available  
Boiling Point: Not available  
Freezing/Melting Point: 103 - 106 deg C  
Decomposition Temperature: Not available  
Solubility in water: Soluble  
Specific Gravity/Density: Not available.  
Molecular Formula: C7H8O3S.H20  
Molecular Weight: 190.22

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.  
Conditions to Avoid: Incompatible materials, dust generation, excess heat, exposure to moist air or water.  
Incompatibilities with Other Materials: Metals, strong oxidizing agents, strong bases.  
Hazardous Decomposition Products: Carbon monoxide, oxides of sulfur, carbon dioxide.  
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 104-15-4: XT6300000  
CAS# 6192-52-5: DB7164000  
RTECS:  
CAS# 104-15-4: Oral, rat: LD50 = 2480 mg/kg;  
LD50/LC50: RTECS:  
CAS# 6192-52-5: Oral, mouse: LD50 = 1683 mg/kg;  
Oral, rat: LD50 = 2570 mg/kg;  
Other: Skin absorption LD50 guinea pig: no evidence at 1.0 g/kg., Skin irritation, guinea pig: Moderate., Repeated skin application, guinea pig: Moderate exacerbation., Skin sensitization, guinea pig: Did not sensitize any animals tested., Eye irritation: Severe, (Eastman Kodak Company)
Carcinogenicity: p-Toluenesulfonic acid anhydrous - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Other: See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: > 100 mg/l; 96 hr; LC50
Other: Do not empty into drains.

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

US DOT
Shipping Name: ARYL SULFONIC ACIDS, SOLID
Hazard Class: 8
UN Number: UN2585
Packing Group: III

Canada TDG
Shipping Name: ARYL SULFONIC ACIDS, SOLID
Hazard Class: 8
UN Number: UN2585
Packing Group: III

### Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: C
Risk Phrases: R 34 Causes burns. Safety Phrases: S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
WGK (Water Danger/Protection) CAS# 104-15-4: 1
CAS# 6192-52-5: 1
Canada
CAS# 104-15-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: E
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 104-15-4 is not listed on Canada's Ingredient Disclosure List. CAS# 6192-52-5 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
CAS# 104-15-4 is listed on the TSCA Inventory.
CAS# 6192-52-5 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR720.3(u)(2)).

Section 16 - Additional Information

MSDS Creation Date: October 2013
Revision Date: October 2018

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.