

# Material Safety Data Sheet

## p-Toluenesulfonic acid monohydrate

ACC# 01968

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** p-Toluenesulfonic acid monohydrate**Catalog Numbers:** AC139020000, AC139020050, AC139021000, AC139025000, AC171780000, AC171780010, AC171780025, AC171785000, AC384310000, AC421210000, AC421210050, AC421215000, 42121-1000, A320-500, A320500LC, NC9406138, NC9555931**Synonyms:** Toluene-4-sulfonic acid; PTSA.**Company Identification:**Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
6192-52-5	p-Toluenesulfonic acid monohydrate	96.5+	unlisted

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white to pink crystals.

**Danger!** Causes burns by all exposure routes. Hygroscopic (absorbs moisture from the air).**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 deg C ( 356.00 deg F)

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

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

**Upper:** Not available.

**NFPA Rating:** (estimated) 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

**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

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
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p-Toluenesulfonic acid monohydrate	none listed	none listed	none listed
p-Toluenesulfonic acid anhydrous	none listed	none listed	none listed

**OSHA Vacated PELs:** p-Toluenesulfonic acid monohydrate: No OSHA Vacated PELs are listed for this chemical. p-Toluenesulfonic acid anhydrous: No OSHA Vacated PELs are listed for this chemical.

#### **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 EN166.

**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 European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystals

**Appearance:** white to off-white - white to pink

**Odor:** weak odor

**pH:** Not applicable.

**Vapor Pressure:** Not available.

**Vapor Density:** 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:** Soluble.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C<sub>7</sub>H<sub>8</sub>O<sub>3</sub>S.H<sub>2</sub>O

**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#** 6192-52-5: DB7164000**CAS#** 104-15-4: XT6300000**LD50/LC50:**

CAS# 6192-52-5:

Oral, mouse: LD50 = 1683 mg/kg;

Oral, rat: LD50 = 2570 mg/kg;

CAS# 104-15-4:

Oral, rat: LD50 = 2480 mg/kg;

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:**

CAS# 6192-52-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 104-15-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found**Teratogenicity:** No information found**Reproductive Effects:** No information found**Mutagenicity:** No information found**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information
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**Ecotoxicity:** Fish: Fathead Minnow: > 100 mg/l; 96 hr; LC50 No data available.**Environmental:** p-Toluenesulfonic acid may exhibit a high biological oxygen demand, and it may cause significant oxygen depletion in aquatic systems. It is expected to be biodegradable and is not likely to bioconcentrate.**Physical:** No information available.**Other:** Do not empty into drains.

Section 13- Disposal Considerations
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Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information
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	US DOT	Canada TDG
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<b>Shipping Name:</b>	ARYL SULFONIC ACIDS, SOLID	ARYLSULPHONIC ACIDS, SOLID
<b>Hazard Class:</b>	8	8
<b>UN Number:</b>	UN2585	UN2585
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

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 is on the inventory (40CFR720.3(u)(2)).

CAS# 104-15-4 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 6192-52-5: immediate.

CAS # 104-15-4: immediate.

**Section 313** No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 6192-52-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 104-15-4 can be found on the following state right to know lists: Pennsylvania, Massachusetts.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### 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# 6192-52-5: 1

CAS# 104-15-4: 1

**Canada - DSL/NDSL**

CAS# 104-15-4 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of 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.

**Canadian Ingredient Disclosure List**

<b>Section 16 - Additional Information</b>
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**MSDS Creation Date:** 6/24/1999**Revision #7 Date:** 10/08/2007

*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.*