

# Material Safety Data Sheet

## alpha-Methylstyrene, 99% stabilized with 15ppm tert-butylcatechol

ACC# 09818

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** alpha-Methylstyrene, 99% stabilized with 15ppm tert-butylcatechol

**Catalog Numbers:** AC127710000, AC127710010, AC127710030, AC127710100, AC127711000, AC127715000, AC9693398, XXAC12771-20

**Synonyms:** 2-Phenylpropene; Isopropenylbenzene.

**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 |
|---------|---------------------|---------|---------------|
| 98-83-9 | Alpha-Methylstyrene | 99      | 202-705-0     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 45 deg C.

**Warning! Flammable liquid and vapor.** Causes respiratory tract irritation. Lachrymator (substance which increases the flow of tears). Causes eye irritation. May cause skin irritation. May cause central nervous system depression. Marine pollutant.

**Target Organs:** Central nervous system.

#### Potential Health Effects

**Eye:** Causes eye irritation. Lachrymator (substance which increases the flow of tears). May cause chemical conjunctivitis and corneal damage.

**Skin:** May cause irritation and dermatitis.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

**Inhalation:** Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation in the chest.

**Chronic:** Effects may be delayed.

### 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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

**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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT use straight streams of water.

**Flash Point:** 45 deg C ( 113.00 deg F)

**Autoignition Temperature:** 445 deg C ( 833.00 deg F)

**Explosion Limits, Lower:** .90 vol %

**Upper:** 6.60 vol %

**NFPA Rating:** (estimated) Health: 2; Flammability: 2; Instability: 0

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

**Handling:** Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braise, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

### Exposure Limits

| Chemical Name       | ACGIH                    | NIOSH                                              | OSHA - Final PELs                              |
|---------------------|--------------------------|----------------------------------------------------|------------------------------------------------|
| Alpha-Methylstyrene | 50 ppm TWA; 100 ppm STEL | 50 ppm TWA; 240 mg/m <sup>3</sup> TWA 700 ppm IDLH | 100 ppm Ceiling; 480 mg/m <sup>3</sup> Ceiling |

**OSHA Vacated PELs:** Alpha-Methylstyrene: 50 ppm TWA; 240 mg/m<sup>3</sup> TWA

### 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 protective gloves to prevent skin exposure.

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

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless

**Odor:** None reported.

**pH:** Not available.

**Vapor Pressure:** 2.9 mbar @ 20 C

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** 0.94 cP 20.00 deg

**Boiling Point:** 165.0 - 169.0 deg C @ 760.00m

**Freezing/Melting Point:** -24 deg C

**Decomposition Temperature:** Not available.

**Solubility:** insoluble

**Specific Gravity/Density:** .9090g/cm<sup>3</sup>

**Molecular Formula:** C<sub>9</sub>H<sub>10</sub>

**Molecular Weight:** 118.18

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, strong oxidants.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS#** 98-83-9: WL5075300

**LD50/LC50:**

CAS# 98-83-9:

Draize test, rabbit, eye: 91 mg Mild;

Draize test, rabbit, skin: 100% Moderate;

Oral, mouse: LD50 = 4500 mg/kg;

Oral, mouse: LD50 = 50000 mg/kg;

Oral, rat: LD50 = 4900 mg/kg;

**Carcinogenicity:**

CAS# 98-83-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.  
**Teratogenicity:** No data available.  
**Reproductive Effects:** No data available.  
**Mutagenicity:** No data available.  
**Neurotoxicity:** No data available.  
**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

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

|                       | US DOT             | Canada TDG         |
|-----------------------|--------------------|--------------------|
| <b>Shipping Name:</b> | ISOPROPENYLBENZENE | ISOPROPENYLBENZENE |
| <b>Hazard Class:</b>  | 3                  | 3                  |
| <b>UN Number:</b>     | UN2303             | UN2303             |
| <b>Packing Group:</b> | III                | III                |

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 98-83-9 is listed on the TSCA inventory.

#### Health & Safety Reporting List

CAS# 98-83-9: Effective 6/1/87, Sunset 11/9/93

#### 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 # 98-83-9: immediate, fire, reactive.

#### 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# 98-83-9 can be found on the following state right to know lists: California, New Jersey, Minnesota, 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:

XI

#### Risk Phrases:

R 10 Flammable.

R 36/37 Irritating to eyes and respiratory system.

#### Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

**WGK (Water Danger/Protection)**

CAS# 98-83-9: 2

**Canada - DSL/NDSL**

CAS# 98-83-9 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B3, D2B.

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**

CAS# 98-83-9 is listed on the Canadian Ingredient Disclosure List.

|                                     |
|-------------------------------------|
| Section 16 - Additional Information |
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**MSDS Creation Date:** 4/16/1998

**Revision #6 Date:** 10/03/2005

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