

STYRENE

Synonyms: Ethenyl benzene, Phenylethylene, Styrene monomer, Styrol, Vinyl benzene

| TYPES OF HAZARD/ EXPOSURE | ACUTE HAZARDS/ SYMPTOMS | PREVENTION | FIRST AID/ FIRE FIGHTING |
|---------------------------|--|--|---|
| FIRE | Flammable. Gives off irritating or toxic fumes (or gases) in a fire. | NO open flames, NO sparks, and NO smoking. | Powder, AFFF, foam, carbon dioxide. |
| EXPLOSION | Above 31°C explosive vapor/air mixtures may be formed. See Notes. | Above 31°C use a closed system, ventilation, and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding). | In case of fire: keep drums, etc., cool by spraying with water. |
| EXPOSURE | | AVOID ALL CONTACT! | |
| •INHALATION | Dizziness. Drowsiness. Headache. Nausea. Weakness. | Ventilation or local exhaust | Fresh air, rest. |
| •SKIN | Redness. | Protective clothing. | Remove contaminated clothes. Rinse and then wash skin with water and soap. |
| •EYES | Redness. Pain. | Safety goggles and eye protection | First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor. |
| •INGESTION | Abdominal pain. (Further see Inhalation). | Do not eat, drink, or smoke during work. Wash hands before eating. | Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest. |

Chemical Dangers: The substance can form explosive peroxides. The substance may polymerize due to warming, under the influence of light and on contact with many compounds such as oxygen, oxidizing agents, peroxides and strong acids with fire or explosion hazard. The substance decomposes on burning producing toxic fumes, styrene oxide. Attacks copper and copper alloys.

Physical Dangers: As a result of flow, agitation, etc., electrostatic charges can be generated.

Storage: Incompatibilities and reactivities include oxidizers, catalysts for vinyl polymers, peroxides, strong acids, aluminum chloride [Note: May polymerize if contaminated or subjected to heat. Usually contains an inhibitor such as tert-butylcatechol.] Peroxidizable compound; date upon receipt and opening. Dispose of after 18 from receipt and 3 months from date of opening.

Handling, Containment Devices and PPE: Use in exhaust hood with nitrile chemical resistant gloves (if heavy exposure is anticipated contact Safety and Health for other glove options) and chemical goggles. If a splash hazard to the face is present, a face shield is also required.

Waste Disposal: Collect and store in a glass container labeled with the following "Hazardous Waste - Styrene." Call Safety and Health at x5069 on the Health Science Campus and x3600 on the Main Campus for pick up.

Emergency Spill Procedures and Decontamination: call x 77 on the Health Science Campus and x2600 for Campus Police on the Main Campus.