

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 787.10

Revision Date: December 7, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Styrene, Monomer

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Styrene, monomer

Synonym: vinylbenzene

CAS#: 100-42-5

SECTION 3 — HAZARDS IDENTIFICATION

Colorless to yellowish liquid. Penetrating aromatic odor.

Styrene is a known human carcinogen (U.S. Dept. of Health and Human Services RoC-12). Slightly toxic by inhalation and ingestion. Body tissue irritant. Lachrymator.

Avoid all body tissue contact.

Flammable liquid.

FLINN AT-A-GLANCE

Health-3

Flammability-3

Reactivity-2

Exposure-3

Storage-3

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class IC flammable liquid.

Flash point: 31 °F Flammable limits: Lower: 1.1% Upper: 6.1% Autoignition Temperature: 490 °C

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

H-2

F-3

R-2

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand or other inert absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, esters and aldehydes.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. Light sensitive.

Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TWA 50 ppm, STEL 100 ppm (NIOSH, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless to yellowish liquid with a penetrating aromatic odor.
Solubility: Alcohol and ether; insoluble in water.
Formula: C_8H_8
Formula weight: 104.16

Boiling point: 145–146 °C
Melting point: –31 °C
Specific gravity: 0.909
Vapor density: 3.6

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers, copper, copper alloys, heat, open flame, or any source of ignition.
Shelf life: Fair to poor.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, irritant, lachrymator, nausea, headache.
Chronic effects: CNS depression, dermatitis, known carcinogen, mutagen.
Target organs: N.A.

ORL-RAT LD_{50} : 5 g/kg
IHL-RAT LC_{50} : 24 g/m³/4H
SKN-RBT LD_{50} : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply, before proceeding.
Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Styrene monomer, inhibited
Hazard class: 3, Flammable liquid
UN number: UN2055
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (202-851-5). RCRA code D001.

SECTION 16 — OTHER INFORMATION

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.