

# 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)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless to yellowish liquid with a penetrating aromatic odor.

Solubility: Alcohol and ether; insoluble in water.

Formula: C<sub>8</sub>H<sub>8</sub>

Formula weight: 104.16

Boiling point: 145–146 °C

Melting point: –31 °C

Specific gravity: 0.909

Vapor density: 3.6

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with oxidizers, copper, copper alloys, heat, open flame, or any source of ignition.

Shelf life: Fair to poor.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Toxic, irritant, lachrymator, nausea, headache.

Chronic effects: CNS depression, dermatitis, known carcinogen, mutagen.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 5 g/kgIHL-RAT LC<sub>50</sub>: 24 g/m<sup>3</sup>/4HSKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #18b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Styrene monomer, inhibited

Hazard class: 3, Flammable liquid

UN number: UN2055

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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