

# MATERIAL SAFETY DATA SHEET

**Trade Name:** STYRENE RESIN THINNER

**Chemical Family:** Styrene

**Formula:** C<sub>6</sub>H<sub>5</sub>CH=CH<sub>2</sub>

**Manufacturer:** ASHLAND  
P.O. Box 2219  
Columbus, OH 43216

**Supplier:** COAST FIBER-TEK  
1306 Boundary Road  
Burnaby, BC V5K 4T6  
Tel.# (604) 294-8116

**Emergency Phone #'s:** 1-800-ASHLAND  
or 1-800-274-5263

**Transportation EMG. Phone #** CANUTEC (613) 996-6666  
(604) 930-0650

## **HAZARDOUS INGREDIENTS:**

**Styrene Monomer:** ≤100% CAS # 100-42-5

*Exposure Limits:* LD50 Oral rat 2650.0 mg/kg,  
LC50 Inhl. rat 2800.0 ppm

## **PHYSICAL DATA:**

*Appearance & Odour:* Clear to yellowish liquid, extremely penetrating

*Odour Threshold:* TLV/TWA 50 ppm, 215 mg/m<sup>3</sup> 8 hrs

*Vapour Pressure:* 0.853248 kPa at 25°C

*Vapour Density:* (air = 1) 3.63.6

*Solubility in Water:* Negligible

*Specific Gravity:* N/A

*Boiling Point/Range:* 293.4°F/145°C @ 760mmHg

*Melting point/Range:* -31°C

*Flash point:* 34.4°C Tag closed cup

*Evaporation rate:* 0.49 N-Butyl Acetate

*Density:* 0.909 g/cm<sup>3</sup> 15°C

## **FIRE & EXPLOSION DATA:**

*Flashpoint & Method:* 34.4°C Tag closed cup

*Flammable Limits:* LFL 1.1%, UFL 6.1%

*Extinguishing Methods:* Foam, water spray, carbon dioxide, dry chemical.

*Special Equipment & Procedures:* Self-contained breathing apparatus and complete protective clothing. Material is volatile and readily gives off vapours which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other sources at locations near the material handling point. Use water to cool fire exposed containers.

## **REACTIVITY DATA:**

*Conditions Contributing to Instability:* Avoid heat, open flame, and prolonged storage at elevated temperatures. Avoid contact with excessive heat.

*Incompatible Substances:* Acids, aluminum chloride, halogens, iron chloride, metal salts, peroxides, strong alkalis, strong oxidizing agents.

*Hazardous Decomposition Products:* May form carbon dioxide, carbon monoxide and various hydrocarbons.

*Hazardous Polymerization:* May occur. Avoid exposure to excessive heat, peroxides and polymerization catalysts.

## **HEALTH HAZARDS DATA:**

**NOTE:** Health studies have shown that exposure to chemicals pose potential risks which may vary from person to person. Exposure to liquids, vapours, mists or fumes should be minimized.

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Styrene - Pg 2

## PRINCIPAL HEALTH HAZARDS:

- Skin Contact: Can cause skin irritation including redness, burning, drying and cracking of skin, burns and other skin damage.
- Eye Contact: Can cause eye irritation including stinging, tearing, redness and swelling of eyes.
- Ingestion: Swallowing small amounts during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting resulting in lung inflammation and other lung injury.
- Inhalation: Breathing of vapour or mist is possible. Symptoms usually occur at air concentrations higher than the recommended exposure limits.
- Chronic Effects: Contains styrene monomer, a possible carcinogen

## FIRST AID PROCEDURES:

- Skin: Wash with soap & water, seek medical attention if irritation persists. Remove contaminated clothing and launder before reuse.
- Eyes: Flush with flowing water for 15 minutes while holding eyelids apart. If irritation persists obtain medical attention
- Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth. Place individual on their left side with head down. Contact a physician, medical facility or poison control center for advice on whether to induce vomiting. If possible do not leave individual unattended
- Inhalation: Remove to fresh air, give oxygen or artificial respiration as required, seek medical attention.

## PREVENTIVE MEASURES:

- Skin: Always apply appropriate barrier cream to exposed skin. Wear impervious gloves (butyl rubber), coveralls and safety footwear.
- Eyes: Chemical proof goggles or full face respirator if vapours cause eye irritation.
- Ingestion: Wash thoroughly before consuming food stuffs.
- Inhalation: Use only in well ventilated areas or use NIOSH approved respiratory protection with organic vapour cartridges.

## CONTROL MEASURES & PRECAUTIONS

Keep container tightly closed. **Do not** consume food, drink or tobacco in work area or material storage areas. Use caution and personal cleanliness to avoid skin and eye contact. Avoid breathing vapours of heated materials. Use paper covering absorbent wipes and suitable disposable containers in work area.

## SPILL, LEAK & DISPOSAL METHODS

**Review fire and explosion hazards and safety precautions before proceeding with clean up.** Restrict access to area. Contain spill to prevent liquid from entering sewers or waterways. Recover free liquid and use an absorbent material (i.e. sand, vermiculite) to soak up balance. Place in suitable container for disposal.

## DISPOSAL METHOD

Dispose only in a facility permitted to dispose of hazardous waste by Federal, Provincial and Municipal regulations.

## SHIPPING INFORMATION

Shipping Name: Styrene Monomer, Stabilized  
Hazard Class: 3  
UN/PIN #: 2055 III  
Flashpoint: 34.4°C  
WHMIS: B2, D2A, D2B,F

The information contained herein is based on data that we believe to be accurate. No warranty either expressed or implied is made. This information is offered solely for your consideration interpretation and information.

**Preparation Date:** January 22, 1993  
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**Telephone #:** (604) 294-8116  
**Revised Date:** January 18, 2007

N/A = Not Available