MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Elmer's Products, Inc.
1 Easton Oval
Columbus, OH 43219

Emergency Phone Number:
Poison Control Center
1-888-516-2502

For additional product information, access our website at www.elmers.com or call 1-888-435-6377. To place an order, call 1-800-848-9400.

SUBSTANCE: ELMER'S FIBERGLASS RESIN - RESIN COMPONENT

TRADE NAMES/SYNONYMS: E770; E771

CREATION DATE: Mar 14 2005
REVISION DATE: Jul 20 2005

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: STYRENE MONOMER
CAS NUMBER: 100-42-5
PERCENTAGE: 30-40

COMPONENT: NON-HAZARDOUS SUBSTANCE
CAS NUMBER: Not assigned.
PERCENTAGE: 60-70

3. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4):
HEALTH=2  FIRE=3  REACTIVITY=0
EMERGENCY OVERVIEW:
COLOR: amber
PHYSICAL FORM: liquid
MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye irritation, central nervous system depression, aspiration hazard, suspect cancer hazard (in animals)
PHYSICAL HAZARDS: Flammable liquid and vapor. Vapor may cause flash fire.

POTENTIAL HEALTH EFFECTS:
INHALATION:
SHORT TERM EXPOSURE: irritation, dizziness, drowsiness, nausea, headache, vomiting, weakness, fatigue, stomach pain, chest pain, disorientation, mood swings, tremors, loss of coordination, unconsciousness, coma
LONG TERM EXPOSURE: irritation, nausea, vomiting, loss of appetite, headache, fatigue, disorientation, pain in extremities, menstrual disorders, nerve damage, brain damage, tumors
SKIN CONTACT:
SHORT TERM EXPOSURE: irritation, itching, absorption may occur, nausea, vomiting, stomach pain, chest pain, headache, drowsiness, dizziness, disorientation, mood swings, tremors, loss of coordination, unconsciousness, coma
LONG TERM EXPOSURE: irritation
EYE CONTACT:
SHORT TERM EXPOSURE: irritation, tearing, blurred vision, eye damage
LONG TERM EXPOSURE: irritation
INGESTION:
SHORT TERM EXPOSURE: gastrointestinal irritation, nausea, vomiting, diarrhea, stomach pain, chest pain, headache, drowsiness, dizziness, disorientation, mood swings, tremors, loss of coordination, unconsciousness, aspiration hazard, coma
LONG TERM EXPOSURE: tumors

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get
immediate medical attention.

**INGESTION:** Aspiration hazard. DO NOT induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. Get immediate medical attention. Give artificial respiration if not breathing.

### 5. FIRE FIGHTING MEASURES

**FIRE AND EXPLOSION HAZARDS:** Severe fire hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive above flash point.

**EXTINGUISHING MEDIA:** carbon dioxide, regular dry chemical, regular foam, water

**FIRE FIGHTING:** Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

**FLASH POINT:** 90 F (32 C) (CC)
**FLAMMABILITY CLASS (OSHA):** IC

**HAZARDOUS COMBUSTION PRODUCTS:**
Thermal decomposition products or combustion: oxides of carbon

### 6. ACCIDENTAL RELEASE MEASURES

**OCCUPATIONAL RELEASE:**
Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

### 7. HANDLING AND STORAGE

HANDLING: Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing vapors.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:
STYRENE MONOMER:
STYRENE:
100 ppm OSHA TWA
200 ppm OSHA ceiling
600 ppm OSHA peak (5 minutes in any 3 hours)
50 ppm (213 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)
100 ppm (426 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)
20 ppm ACGIH TWA
40 ppm ACGIH STEL
50 ppm (215 mg/m3) NIOSH recommended TWA 10 hour(s)
100 ppm (425 mg/m3) NIOSH recommended STEL

VENTILATION: Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

PROTECTIVE MATERIAL TYPES: rubber

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory
protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.
Any chemical cartridge respirator with organic vapor cartridge(s).
Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).
Any air-purifying respirator with a full facepiece and an organic vapor canister.

For Unknown Concentrations or Immediately Dangerous to Life or Health - Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid
APPEARANCE: opaque
COLOR: amber
ODOR: Not available
BOILING POINT: Not available
FREEZING POINT: Not available
VAPOR PRESSURE: Not available
VAPOR DENSITY (air=1): >1
SPECIFIC GRAVITY (water=1): 1.15
WATER SOLUBILITY: Not available
PH: Not available
VOLATILITY: Not available
VOLATILITY BY WEIGHT: 35% approximate
ODOR THRESHOLD: Not available
EVAPORATION RATE:
<1 (ether=1)>VOC: 402 g/L
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.

INCOMPATIBILITIES: acids, alkalis, oxidizing materials
HAZARDOUS DECOMPOSITION:
Thermal decomposition products or combustion: oxides of carbon

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

STYRENE MONOMER:
IRRITATION DATA:
500 mg rinsed skin-human; 500 mg open skin-rabbit mild; 100 percent skin-rabbit moderate; 100 mg eyes-rabbit severe; 100 mg/24 hour(s) eyes-rabbit moderate
TOXICITY DATA:
11800 mg/m3/4 hour(s) inhalation-rat LC50; >5010 mg/kg skin-rabbit LD50; 2650 mg/kg oral-rat LD50
CARCINOGEN STATUS: IARC: Human Inadequate Evidence, Animal Limited Evidence, Group 2B; ACGIH: A4 -Not Classifiable as a Human Carcinogen
LOCAL EFFECTS:
Irritant: inhalation, skin, eye
ACUTE TOXICITY LEVEL:
Moderately Toxic: inhalation, ingestion
TARGET ORGANS: central nervous system
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: central nervous system disorders, respiratory disorders, skin disorders and allergies
TUMORIGENIC DATA: Available.
MUTAGENIC DATA: Available.
REPRODUCTIVE EFFECTS DATA: Available.
ADDITIONAL DATA: May cross the placenta. Alcohol may enhance the toxic effects.

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations. Subject to disposal regulations:
14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:
PROPER SHIPPING NAME: Styrene monomer, stabilized mixture
ID NUMBER: UN2055
HAZARD CLASS OR DIVISION: 3
PACKING GROUP: III
LABELING REQUIREMENTS: 3

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
SHIPPING NAME: Styrene monomer, stabilized mixture
UN NUMBER: UN2055
CLASS: 3
PACKING GROUP/RISK GROUP: III

15. REGULATORY INFORMATION

U.S. REGULATIONS:
CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):
STYRENE: 1000 LBS RQ
Aniline: 5000 LBS RQ
1,4-Dioxane: 100 LBS RQ
ETHYLENE OXIDE: B10 LBS RQ
Benzene: 10 LBS RQ


SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
ACUTE: Yes
CHRONIC: Yes
FIRE: Yes
REACTIVE: No
SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65):
STYRENE

OSHA PROCESS SAFETY (29CFR1910.119):
ETHYLENE OXIDE: 5000 LBS TQ

STATE REGULATIONS:
California Proposition 65: Known to the state of California to cause the following:
Aniline
Cancer (Jan 01, 1990)
1,4-Dioxane
Cancer (Jan 01, 1988)
ETHYLENE OXIDE
Cancer (Jul 01, 1987)
Female reproductive toxicity (Feb 27, 1987)
Benzene
Cancer (Feb 27, 1987)
Developmental toxicity (Dec 26, 1997)
Male reproductive toxicity (Dec 26, 1997)

CANADIAN REGULATIONS:
WHMIS CLASSIFICATION: B2, D2A, D2B.

NATIONAL INVENTORY STATUS:
U.S. INVENTORY (TSCA): All the components of this substance are listed on or are exempt from the inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDSL): All of the components of this product are listed on the DSL.

16. OTHER INFORMATION

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