82/80 ซอยเอกมัย 22(นวลน้อย) ถ.สุขุมวิท 63 แขวงคลองตันเหนือ เขตวัฒนา กรุงเทพมหานคร 10110โทร0-2715-0897-9 แฟกซ์.0-2392-3410-3 82/80 Soi Eakmai 22(nuan-noi) 63 Sukhumvit Rd, Klong Ton Nuea, Wattana, Bangkok 10110 E-mail: service@modernchemical.co.th

# **SAFETY DATA SHEET**

### STYRENE MONOMER

## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: STYRENE MONOMER

Recommended use: Chemical for industrial

Manufacturer/Supplier: MODERN CHEMICAL CO.,LTD.

82/80 Soi Ekamai 22 (Nuannoi), Sukhumvit 63,

Klong Tan Nuea, Watthana, Bangkok 10110

Telephone No: 0-2715-0897-9, 0-2392-3410-3

Fax No: 0-2715-0908-9, 0-2391-1571-2

Emergency Telephone No: 0-2715-0897-9, 0-2392-3410-3

### 2. HAZARDS IDENTIFICATION

#### Label elements

Pictogram



Signal word

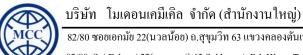
# Danger

#### **Hazard statement(s)**

- 1.) Highly flammable liquid and vapour.
- 2.) Causes skin irritation.
- 3.) May be fatal if swallowed and enters airways.
- 4.) May cause drowsiness or dizziness.
- 5.) Toxic to aquatic life with long lasting effects.
- 6.) May damage the unborn child. Suspected of damaging fertility.

# **Precautionary statement(s)**

1.) Keep away from heat/sparks/open flames/hot surfaces. - No smoking.



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- 2.) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- 3.) Avoid release to the environment.
- 4.) IF SWALLOWED: call a doctor/physician. Do NOT induce vomiting.
- 5.) IF IN EYES: Rinse cautiously with water for 15 minutes.
- 6.) IF ON SKIN Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: Phenylethylene, Vinylbenzene, SM

Ingredients	% (w/w)	CAS NO.
STYRENE MONOMER	100	100-42-5

#### 4. FIRST AID MEASURES

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**Inhalation**: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse

mouth with water. Consult a physician.

# 5. FIRE-FIGHTING MEASURES

## Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# **Unsuitable Extinguishing Media:**

No data available

#### Specific hazards arising from Chemicals:

Carbon oxides

#### **Special protective equipment for fire-fighters:**

Wear self contained breathing apparatus for fire fighting if necessary.

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# 6. ACCIDENTAL RELEASE MEAS

**Precautions:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure

adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe

areas. Beware of vapours accumulating to form explosive concentrations. Vapours

can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

Methods and Material for Containment and Clean Up:

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

#### 7. HANDLING AND STORAGE

#### **Precautions for Safe Handling & Product Transfer:**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### **Conditions for Safe Storage & Unsuitable Materials:**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: 2 - 8°C Light sensitive.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: No data available

**Appropriate Engineering Controls:** No data available

**Individual Protection Measures** 

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory and components test

and approved under appropriate government standards such as NIOSH (USA) or

CEN (EU). Require when vapors/aerosols are generated. Recommended Filter type:

Filter A-(P2).

**Hand protection:** Handle with gloves. In case full contact wear gloves from nitrile rubber material, in

splash contact wear gloves from polychloprene material. The select protective

(MCC)

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gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard

EN 374 derived from it.

**Eye protection:** Goggles giving complete protection to eyes.

**Skin and body protections:** Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty

work shoes.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end workday. Keep away from food, drink.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor: liquid, Colorless, Characteristic	Evaporation rate : N/A	
Melting Point : -31 °C	<b>Specific gravity :</b> 0.906 g/cm <sup>3</sup> at 25 °C	
pH: N/A	Solubility in water: Not Soluble	
<b>Boiling point :</b> 145-146 °C	Viscosity: N/A	
Vapour pressure: 16.5 hPa at 37.7 °C	Vapour density (air=1): N/A	
Lower explosive limits: 1.1 %Vol	Upper explosive limits: 8.9 %Vol	
Auto-ignition temperature : 480-490 °C	Flash point: 32 °C	
Odour threshold: N/A	Flammability (solid, gas): N/A	
Decomposition temperature: N/A	Solubility in other solvents: N/A	
n-octanol/water partition coefficient (log $P_{ow}$ ): N/A		

# 10. STABILITY AND REACTIVITY

Chemical Stability: No data available

**Reactions:** No data available

Possibility of Hazardous Reactions: No data available

**Conditions to avoid:** Heat, flames and sparks.

Materials to avoid: Oxidizing agents, Copper

**Hazardous decomposition products:** Other decomposition products - No data available

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** LD50 (oral, rat): 2650 mg/kg

**Sensitization:** No data available



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**Chronic toxicity**: No data available

Further toxicological information: No data available

#### 12. ECOLOGICAL INFORMATION

## **Toxicity**

Toxicity to fish: LC50 - Leuciscus idus (Golden orfe) - 17,00 - 66,00 mg/l - 48 h

NOEC - Pimephales promelas (fathead minnow) - 4 mg/l - 96 h

LC50 - Pimephales promelas (fathead minnow) - 4,08 mg/l - 96 h

LOEC - Pimephales promelas (fathead minnow) - 7,6 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 182,00 mg/l - 24 h

NOEC - Daphnia magna (Water flea) - 1,9 mg/l - 48 h

LOEC - Daphnia magna (Water flea) - 3,3 mg/l - 48 h

EC50 - Daphnia magna (Water flea) - 4,7 mg/l - 48 h

Toxicity to algae No data available

Toxicity to bacteria No data available

Biodegradability Remarks: No data available

Bioaccumulative Potential: No data available

**Mobility:** No data available

**Affected in any other way:** No data available

## 13. DISPOSAL CONSIDERATIONS

Material Disposal: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra

care in igniting as this material is highly flammable. Offer surplus and non-recyclable

solutions to a licensed disposal company. Contact a licensed professional waste disposal

service to dispose of this material.

**Container Disposal:** Dispose of as unused product.

# 14. TRANSPORT INFORMATION

#### ADR/RID

UN-No: 2055 Class: 3 Packing group: III

Proper shipping name: STYRENE MONOMER, STABILIZED

MCC MCC

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**IMDG** 

UN-No: 2055 Class: 3 Packing group: III

Marine pollutant: No

Proper shipping name: STYRENE MONOMER, STABILIZED

**IATA** 

UN-No: 2055 Class: 3 Packing group: III

Proper shipping name: Styrene monomer, stabilized

# 15. REGULATORY INFORMATION

**GHS-Labeling** 

**Hazard statement(s):** 

no data available

**Precautionary statement(s):** 

no data available

R - phrase(s):

no data available

S - phrase(s):

no data available

# 16. Other Information

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