STYRENE MONOMER

PRODUCT IDENTIFICATION

CAS NO. 100-42-5 EINECS NO. 202-851-5 FORMULA $H_2C=C_6H_5CH$

MOL WT. 104.15 H.S. CODE 2902.50

TOXICITY Oral rat LD50: 2650 mg/kg

SYNONYMS Vinyl benzene; Stryrene; Cinnamenol; Cinnamol;

Cinnamene; Cinnamenol; Ethenylbenzene; Phenethylene; Vinylbenzene; Vinylbenzol;

Phenylethene; Stirolo (Italian); Styreen (Dutch); Styren (Czech); Styrol (German); Styrolene; Styron;

Styropol; Styropor; Vinylbenzen (Dutch);

DERIVATION CLASSIFICATION

GENERAL DESCRIPTION

Styrene Monomer is the raw material for polystyrene and EPS, accounting for approximately two thirds of total styrene monomer production. The remaining styrene monomer is used as a feedstock in the production of SAN, ABS and the unsaturated polyester resins, SBR and polymer latex. Major downstream styrene markets (polystyrene and ABS) are under pressure as a result of oversupply and interpolymer competition, although rationalization of older, smaller styrenics units should help balance out the market.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE Clear liquid
MELTING POINT -30 - 31 C
BOILING POINT 145 - 146 C

SPECIFIC GRAVITY 0.91
SOLUBILITY IN WATER < 1%
pH 7
VAPOR DENSITY 3.60

AUTOIGNITION

NFPA RATINGS Health: 2; Flammability: 3; Reactivity: 2

REFRACTIVE INDEX 1.5470

FLASH POINT

STABILITY Stable under ordinary conditions. But forming peroxides in the absence of

inhibitors.

APPLICATIONS

Polystyrene, ABS resins, SB latex,unsaturated polyester resins, SB rubber, thermoplastic elastomers ,styrene-butadiene, styrene-maleic styrene-acrylic ester copolymers.

SALES SPECIFICATION

APPEARANCE	Clear liquid
PURITY	99.7% min [G.C.]
POLYMER	10ppm max [ASTM D-2121]
CHLORIDES	1ppm max [ASTM D-2747]
SULFUR	1ppm max [ASTM D-2747]
COLOR, APHA	10max [ASTM D-1209]
BENZALDEHYDE	100ppm max [ASTM D2119]
H2O2	50ppm max [ASTM D2340]

INHIBITOR(TBC)	10 - 20ppm max [Badger Method 8]	
TRANSPORTATION		
PACKING	180kgs in drum	
HAZARD CLASS	Not regulated	
UN NO.		
OTHER INFORMATION		
Hazard Symbols: XN, Risk Phrases: 10-36/38-20-23		