

SALES SPECIFICATIONS

APC Product : Styrene Monomer

APC Spec. No. : 08-002-0

Effective Date : 1 April 2018

Description

Styrene Monomer (SM) is a colorless to yellowish liquid with an aromatic, sweet odor. If styrene is not stabilized with an appropriate inhibitor, light and heat may promote an uncontrolled polymerization reaction, forming polystyrene.

Styrene Monomer (SM) is classified as a flammable liquid and vapor under the Globally Harmonized System (GHS) on classification and labeling.

Specification

Properties	Unit	Test Method	Value
Purity	% wt	ASTM D5135	99.7 min
Polymer	ppm	ASTM D2121	10 max
Colour (Pt-Cobalt)		ASTM D1209	10 max
Aldehydes as Benzaldehyde	ppm	ASTM D2119	200 max
Peroxide as H ₂ O ₂	ppm	ASTM D2340	100 max
Total Sulfur	ppm	ASTM D5453	30 max

Typical Properties

Properties	Unit	Test Method	Value
Density @ 15 °C	g/ml	ASTM D4052	0.900 - 0.920
p-tert-Butylcatechol	ppm wt.	ASTM D4590	5 - 40
Inhibitor	ppm	ASTM D2120	(10-20) as request

Application

Styrene Monomer (SM) is a basic building block of the plastics and synthetic rubber industries. It is used to make a host of downstream derivative products that go into many consumer goods. The primary derivatives of styrene monomer, in order of importance, include: polystyrene, expandable polystyrene (EPS) and acrylonitrile butadiene-styrene (ABS) resin, Styrene-acrylonitrile (SAN) resin, styrene butadiene (SB) latex, SB Rubber (SBR), unsaturated polyester resin (UPR), and styrene thermoplastic elastomers (TPE).