

SP-1045/IN

Description

SP-1045 is a heat- reactive octyphenol-formaldehyde resin that contains methylol groups.

General Product Data

Product Specifications	
Appearance	Pale Yellow to yellow
Softening Point by B & R Method, °C	85 – 95
Colour on gardner scale (60% in Toluene)	Max. 6.0
Methylol Content, %	8.0 – 11.0
Heat Loss (@ 100 °C for 16 hrs), %	Max. 1.25
Ash Content, %	Max. 0.1
Ferric Chloride Test	Positive (blue colour)
Specific Gravity @ 25 °C	1.015 – 1.055

*Test method available upon request

Typical Properties	
Physical State	Solid
Solubility in Water	Not very Soluble (<1%)
Melting Point	70 °C (158 °F)
Flash Point (Tag Closed CUP)	210 °C (415 °F)

Solubility

SP-1045 is soluble in aromatic, aliphatic, ketones and higher alcohols and naphthas.

Application

SP-1045 was specifically designed for the cure of Isobutylene- Isoprene (Butyl) rubber by the resin cure system*. SP-1045, used in combination with halogen and zinc donors, yields butyl vulcanizates with outstanding resistance to high heat and compression set. In addition, these vulcanizates are non- blooming, non-staining and have high modulus values. Resin cured butyl rubber, because of its versatility and inherent ozone resistance, has been employed in many areas including tire curing bladders, conveyor belts, gaskets, and heat- resistant packing compounds. The octyl group also makes SP-1045 compatible with other elastomers, and can be used to make cements offering a wide range of properties. In addition, the reactive methylol groups can be used as functional sites for a variety of reactions such as with rosin for the printing ink market.

Formula for Curing Butyl Rubber

Following is the rudimentary test formulation which demonstrates the cure of butyl rubber by the resin cure system. The resin should be added on a 2 roll-mill or in the last pass through a mixer to prevent premature cure.

EXXON 1 Butyl 268	95 Parts
Neoprene W ²	5 Parts
HAF Carbon Black	50 Parts
Zinc Oxide	5 Parts
Castor Oil	5 Parts
SP-1045 Resin	10 Parts

Storage and Shelf Life

SP-1045 should be stored where temperatures do not exceed (35°C) for long periods of time. For best results, it is recommended that this product be used within 6 months of manufacture date. As with all phenolic resins, SP-1045 will become darker with age. Pallets should never be stored double stacked.

Note: Resins of this type are known to agglomerate or sinter during storage. This condition does not affect the performance of the resin in its normal application and is not considered justification for rejection or return.

Packaging

25kgs net weight in paper bags.

Safety And Regulatory Information

Kindly refer to standard MSDS of SI Group-India Private Ltd.

*united States patent no. 2,70,1895 and others to Uniroyal, Inc.

1. Registered trademark of Exxon chemical Company.

2. Product of E.I. Dupont de Nemours.