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RESINS & TACKIFIERS
-PHENOLIC-

SP-1045 RESIN
(fka: P-101)

PRODUCT DESCRIPTION:

SP-1045 is a heat reactive, phenolic resin used in the resin curing of butyl rubbers*, adhesive systems and sealants. A halogen donating activator (typically 5 phr of mercaptan-modified polychloroprene is used in butyl polymers) should be added for best results. Halogenated butyls do not require a halogen donor as activator.

TYPICAL PROPERTIES:

Physical Form	Flake
Softening Point, Ball & Ring (°C).....	80 – 95
Specific Gravity	1.04
Methylol Content (%).....	9.5 – 11
Melting Point, Capillary (°F).....	140 – 150

SOLUBILITY:

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

APPLICATION:

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.

Recommended loadings:

- Butyl 10-12 phr (plus halogen donor); Chlorobutyl 4-5 phr;
- Bromobutyl 1-3 phr (1 phr SP-1045 with 3 phr ZnO is used in pharmaceutical applications)

STORAGE:

For best results, SP-1045 should be stored where temperatures do not exceed 86°F for extended periods of time. As with all phenolic resins, SP-1045 will become darker with age.

* U.S. Patent No. 2,701,895 and others to U.S. Rubber Co.

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