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RESINS & TACKIFIERS
-PHENOLIC-

SP-1055
(formerly P-124 Resin)

PRODUCT DESCRIPTION:

SP-1055 is a heat-reactive, brominated octylphenol-formaldehyde resin that contains methylol groups.

TYPICAL PROPERTIES:

Physical Form	Flake
Melting Point, Capillary (°F).....	140 – 158
Specific Gravity	1.05
Softening Point, Ball & Ring (°C).....	85 – 95
Bromine Content (%).....	3.6 – 4.0
Methylol Content (%).....	10 – 14

SOLUBILITY:

SP-1055 is soluble in aromatic, aliphatic, ketones and naphtha

APPLICATION:

SP-1055 may be used with butyl rubber or other unsaturated elastomers with or without functionality. The presence of functionality allows for a faster cure. SP-1055 is unique in that it does not require a halogen donor. The use of brominated resins in compounding is especially effective when the rubber may be exposed to heat or repeated use. The rubber will not deteriorate as quickly as rubber crosslinked with other curing agents. SP-1055 exhibits good processing properties and offers an adequate scorch safety margin in a wide processing range. Rubbers compounded with SP-1055 exhibit exceptional scorch safety, high temperature stability and excellent dynamic properties. SP-1055 has a slower cure than SP-1056 due to a lower bromine content. SP-1055 has a faint halogen odor, and normal handling precautions should be followed.

Recommended loadings:

SP-1055 is a self-activating resin for butyl rubber whereby the recommended usage is 12 phr. Where maximum ozone resistance is required, 15 phr is needed. 3-5 phr usage is recommended with halobutyl, and 10 to 15 phr for the unsaturated polymers like NR or SBR. Use 15 phr in EPDM. To maximize state-of-cure, add 5 phr ZnO and 5 phr Hypalon as additional activators. No change in black loadings are required as with any other polymer, however, with mineral fillers, they must be completely alkali free so as not to poison the cure.

STORAGE:

For best results, SP-1055 should be stored where temperatures do not exceed 86°F for extended periods of time. As with all phenolic resins, SP-1055 will become darker with age.

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