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RESINS & TACKIFIERS
-PHENOLIC-

HRJ-10518 RESIN
(formerly P-180)

PRODUCT DESCRIPTION:

HRJ-10518 is a heat-reactive resin made from octylphenol and formaldehyde. This resin contains active hydroxymethyl (methylol) groups, and was developed specifically to cure natural rubber. Many other unsaturated elastomers can be cured by HRJ-10518 via the resin cure system.

TYPICAL PROPERTIES:

Physical Form	Flake
Melting Point, Capillary (°F).....	140 – 150
Specific Gravity	1.05
Softening Point, Ball & Ring (°C).....	85 – 95
Methylol Content (%)	6 – 9

SOLUBILITY:

HRJ-10518 is soluble in aromatic, aliphatic, ketones, higher alcohols and naphtha

APPLICATION:

HRJ-10518 crosslinks through C-C bridges, which results in an inherent ozone resistant and heat resistant cured rubber system. Rubber products using HRJ-10518 have many end uses such as tire curing bags, conveyor belts, gaskets and heat resistant packing. Due to its high reactivity, HRJ-10518 is also a good choice for elastomeric systems where an increased rate of cure or a low temperature cure cycle is desired. Since HRJ-10518 has a low melting point, it also blends easily into rubber stock. HRJ-10518, used in combination with catalysts such as halide-bearing elastomers and metallic chlorides, yields butyl rubber vulcanizates with outstanding resistance to high dry heat and compression set. HRJ-10518 provides a rapid cure at normal curing temperatures and promotes adequate cure at lower temperatures. HRJ-10518 can also be used to formulate pressure sensitive adhesives, inks, and thermoplastic elastomers. The long alkyl chain provides good compatibility with butyl, natural, nitrile, polychloroprene, EPDM, and other elastomers.

HRJ-10518 cures faster and develops modulus more rapidly than other commercial resins used for this purpose. Care must be taken to avoid scorching. It may be necessary to adjust resin and/or accelerator levels to avoid this problem.

STORAGE:

For best results, HRJ-10518 should be stored where temperatures do not exceed 86°F for extended periods of time. As with all phenolic resins, HRJ-10518 will become darker with age.

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