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RESINS & TACKIFIERS
-PHENOLIC-

SP-553 RESIN
(formerly P-104)

PRODUCT DESCRIPTION:

SP-553 is an oil-soluble, thermoplastic, terpene phenolic resin having a wide compatibility range. The largest end-use application is as a tackifier for solvent-borne and hot-melt adhesives.

TYPICAL PROPERTIES:

Physical Form	Flake
Softening Point, Ball and Ring, (°C)	110 - 120
Color, Gardner, 50% in Toluene.....	0 - 10
Specific Gravity	1.10

SOLUBILITY:

Soluble in aromatic and aliphatic hydrocarbons, alcohols, ketones, and esters.

STORAGE:

For best results, SP-553 should be stored where temperatures do not exceed 86°F for extended periods of time. As with all phenolic resins, SP-553 will become darker with age.

APPLICATIONS:

SP-553 Resin is used to increase the tack retention of both CR and SBR adhesives. In the case of CR adhesives, the use of excessive amounts of this resin will cause a considerable reduction in the cohesive strength of the adhesive film. However, it should be noted that SP-553 Resin will function as an effective tackifier for CR cements even in the presence of magnesium oxide where it will not react to form a non-tacky product.

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SUGGESTED FORMULATION - PRESSURE-SENSITIVE MASTIC:

PART A

<u>Material</u>	<u>Parts (by weight)</u>
Neoprene WRT*	100.0
Zinc Oxide	5.0
Magnesium Oxide.....	4.0
Zalba*	2.0
Organic Solvent	333.0

Compound base on mill, then disperse in solvent with heavy duty mixer.

PART B

Dissolve 50 parts (by weight) of SP-553 Resin to 25 percent solids in solvent.

PART C

Combine Parts A and B by stirring and apply to backing.

On paper backing, this mastic produces excellent resistance to oil and heat aging when compared to standard pressure-sensitive mastics based on natural rubber. Peel adhesive strengths are in the range of 4 pounds per linear inch.

* Products of E.I. du Pont de Nemours & Company, Inc. Wilmington, DE