

# SP-103

## Description

SP-103 is an alkylphenol-formaldehyde resin used in making polychloroprene contact cements. The outstanding features of this resin are its light color and ability to extend open time without affecting other properties of the finished adhesive.

## General Product Data

### Product Specifications:

Softening Point, B&R, (°C)	87 - 95
Melting Point, Capillary Tube, (°F)	146-158
Color, Gardner, 60% Solution in Toluene	0 - 7
Methylol Content, (%)	8 - 11

Test Methods available upon request

### Typical Properties:

Specific Gravity	1.10
Physical Form	Flake

### Solubility:

SP-103 is soluble in aromatic and aliphatic hydrocarbons, esters, ketones and partially in higher alcohols.

## Application

SP-103 is extensively employed in the preparation of general- purpose and heat-activating polychloroprene cements. It can also be used in formulating adhesives with NBR, SBR, natural and reclaimed rubbers. SP-103 is completely compatible with polychloroprene and nitrile rubbers. It has a compatibility limit of approximately 25 parts by weight in combination with 100 parts by weight of SBR, natural, and reclaimed rubbers. In polychloroprene contact cements, SP-103 extends tack life, increases the specific adhesion of the film to metal and glass, and increases the cohesive strength of the adhesive film itself. SP-103 may be mixed directly into solvent to make a solution, or milled into rubber stocks.

## Typical Contact Cement Formula

### Part A: Rubber Base:

Material	Parts by Weight
Polychloroprene AD	100.0
Zinc Oxide	5.0
Magnesium Oxide	4.0
Ethanox® antioxidant <sup>1</sup>	2.0

Dissolve to 25 percent solids in solvent of choice.

### Part B: Resin Pre-Reaction:

Material	Parts by Weight
SP-103	45.0
Magnesium Oxide	4.5
Water	2.0

Dissolve to 50 percent solids in solvent of choice. Agitate a minimum of three hours.

### Finished Adhesive:

Add **Part B** to **Part A** with mixing to complete the formulation.

<sup>1</sup> Product of SI Group Inc. (Ethanox® 310, Ethanox® 4702)

## Storage And Shelf Life

SP-103 should be stored where temperatures do not exceed 95 °F (35 °C) for long periods of time. For best results, it is recommended that this product be used within 1 year of manufacture date. As with all phenolic resins, SP-103 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

SP-103 is packaged in bags at 25 kilograms net weight, stretch-wrapped on pallets.

## **Safety And Regulatory Information**

For a current Safety Data Sheet (SDS) or other regulatory information, contact SI Group, Inc. at [productinfo@siigroup.com](mailto:productinfo@siigroup.com).