

# PHENOL FORMALDEHYDE RESIN

## Property & Usage

**Megachem-Phenol Formaldehyde Resin** is irregular transparent solid and soluble in ester, gum turpentine, gasoline solvent, dry oil, etc. It's made from condensation of p-tertiary butyl phenol (p-t-butyl phenol) and formaldehyde under catalysis of calcium hydroxide, also named as Alkyl-Phenol Formaldehyde Resin. Due to its reactive methylol groups, it's most widely used in making polychloroprene contact cements that exhibit long open times and metal coatings. It's soluble in aromatic or aliphatic hydrocarbons, esters, ketones, partially in higher alcohols and completely compatible with nitrile and polychloroprene rubbers. It has a compatibility limit of about 25 in combination with 100 parts by weight of SBR, natural, and reclaimed rubbers.

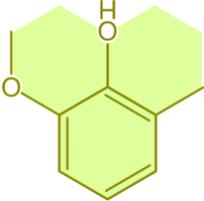
Usage in high quality paint, coating and adhesive agent & vulcanized agent of rubber products. It's extensively employed in the preparation of general purpose and heat-activating polychloroprene cements. It can also be used in formulating adhesives with NBR, SBR, natural and reclaimed rubbers.

## Technical Data Sheet

### PHENOL FORMALDEHYDE RESIN F7522

Appearance	clear yellowish solid (irregular pieces/flakes)
Color (Gardner)	4 - 8
Softening point (R&B, deg C)	85 - 115
Hydroxymethylate content	9 - 15%
Free phenol content	1.5% max.
Free aldehyde content	0.5% max.

## Package & Notes

<b>Package</b> 25kg net kraft polybag 25kg net kraft polybag	<b>20'FCL load</b> 18mt (720bags) 16mt (640bags)-pallet	
<b>Structural - (C<sub>10</sub>H<sub>14</sub>O·CH<sub>2</sub>O)<sub>x</sub></b> 	<b>CAS Number</b> 9003-35-4/25085-50-1  <b>HS Code</b> 39094000	<b>EC# (EINECS#)</b> 500-005-2/607-533-3  <b>Standard</b> industry standard
<b>Storage</b> In cool place, avoid fire and high temperature.		

## TERPENE PHENOLIC RESIN

### Property & Usage

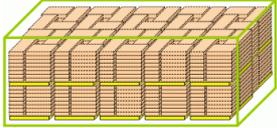
**Megachem-Terpene Phenolic Resin** is made from gum turpentine and phenol. It features as high softening point & light color, close distribution of molecular weight, superior tackifying ability & heat-resistance, extensive solvency & good phase with various kinds of elastomer or resin, and a longer period of the tackifying ability at early stage for solvent adhesive.

Usage in chloronorgutta rubber adhesive for PVC artificial leather, dismodule type of CR adhesive, hot-melt adhesive & adhesive tape, and sole adhesive of top grade shoes.

### Technical Data Sheet

TERPENE PHENOLIC RESIN	T8037
Appearance	irregular pieces
Color (Gardner)	7 max.
Softening point (R&B, deg C)	145 - 160
Acid value (mgKOH/g)	45 - 60

### Package & Notes

<b>Package</b> 25kg net kraft polybag 25kg net kraft polybag	<b>20'FCL load</b> 18mt (720bags) 16mt (640bags)-pallet	
<b>Structural</b> - CH <sub>2</sub> O·W <sub>99</sub> n/a	<b>CAS Number</b> 68188-04-5/68240-08-4	<b>EC# (EINECS#)</b> polymer
	<b>HS Code</b> 39111000	<b>Standard</b> industry standard
	<b>Storage</b> In cool place, avoid fire and high temperature.	

## OCTYL BROMIDE PHENOLIC RESIN

### Property & Usage

**Megachem-Octyl Bromide Phenolic Resin** is an octyl bromide-phenol thermally reactive resin, used for effective vulcanization of low unsaturated rubber. It is also widely used in vulcanized capsules, medical capsules, tires, seals, heat resistant gaskets, pressure sensitive adhesives, inks, thermoplastic elastomers and other fields. It has an active hydroxymethyl group and soluble in aromatic hydrocarbon & organic solvents like toluene, xylene, acetone, ether, ethyl acetate, gasoline, kerosene, turpentine, etc. It's also known as as vulcanization resin, especially suitable for vulcanization of natural rubber and unsaturated rubber. The process of resin use does not require the addition of halogen activator.

As vulcanization resin / rubber curing agent in rubber production like butyl rubber (IIR), nitrile butadiene rubber (NBR), styrene butadiene rubber (SBR), neoprene/chloroprene rubber (CR) & natural rubber (NR), tyres, sealants, conveyer belts, inks, adhesives, etc.

### Technical Data Sheet

OCTYL BROMIDE PHENOLIC RESIN	PH55	PH56
Appearance	yellow to red-brown transparent pieces	yellow to red-brown transparent pieces
Softening point (R&B, deg C)	85 - 95	80 - 95
Hydroxymethylate content	9% - 12%	9% - 12%
Specific gravity (25 deg C)	1.05 about	1.04 about
Bromine content	3.6% - 4.0%	6.0 - 7.0%
Equivalent to Schenectady (SII)	SP-1055	SP-1056

### Package & Notice

<b>Package</b> 25kg net in kraft/plastic woven bag	<b>20'FCL load</b> 15mt (600bags)	<b>20'FCL palletized</b> 14mt (560bags)
<b>HS code</b> 39094000	<b>CAS Number</b> unspecified	<b>EC# (EINECS)</b> unspecified
<b>Structural</b> macromolecule polymer	<b>Storage</b> In cool place, avoid fire and high temperature.	

## OCTYL PHENOLIC RESIN

### Property & Usage

**Megachem-Octyl Phenolic Resin** is an octyl-phenol thermally reactive resin, for rubber curing applications and it may be brominated for better performance. It is also widely used in pressure sensitive adhesive, ink, thermoplastic elastomer and other fields. It has an active hydroxymethyl group and soluble in aromatic hydrocarbon & organic solvents like toluene, xylene, acetone, ether, ethyl acetate, gasoline, kerosene, turpentine, etc. It's also known as as vulcanization resin, especially suitable for vulcanization of natural rubber and unsaturated rubber.

As vulcanization resin / rubber curing agent in rubber production like butyl rubber (IIR), nitrile butadiene rubber (NBR), styrene butadiene rubber (SBR), neoprene/chloroprene rubber (CR) & natural rubber (NR), tyres, sealants, conveyer belts, inks, adhesives, etc.

### Technical Data Sheet

OCTYL PHENOLIC RESIN	PH45
Appearance	yellowish-greenish transparent pieces
Softening point (R&B, deg C)	85 - 95
Hydroxymethylate content	10% - 14%
Specific gravity (25 deg C)	1.04 about
Bromine content	-
Acid value (mgKOH/g)	-
Equivalent to Schenectady (SII)	SP-1045

### Package & Notice

<b>Package</b> 25kg net in kraft/plastic woven bag	<b>20'FCL load</b> 15mt (600bags)	<b>20'FCL palletized</b> 14mt (560bags)
<b>HS code</b> 39094000	<b>CAS Number</b> unspecified	<b>EC# (EINECS)</b> unspecified
<b>Structural</b> macromolecule polymer	<b>Storage</b> In cool place, avoid fire and high temperature.	

## Octyl Phenolic Tackifer Resin

### Property & Usage

**Megachem-Octyl Phenolic Tackifer Resin** is an Thermoplastic resin, Octyl phenolic adhesive resin is an effective viscosifier for natural rubber and synthetic rubber. It has good compatibility with rubber and good viscosity. It can improve the aging resistance and chemical stability of vulcanized rubber. Widely used in tires, rubber tape and other products.

Used to produce tires, belts, hoses, food containers, gaskets and soles, etc. It can reduce the Mooney viscosity of the rubber material, improve the self-adhesion of the rubber material, improve the physical mechanical properties and thermal aging properties of the rubber material and have no adverse effect on the vulcanized rubber material.

### Technical Data Sheet

Octyl Phenolic Tackifer Resin	PH68
Appearance	yellow to red-brown transparent pieces
Softening point (R&B, deg C)	85 - 95
Acid value (mgKOH/g)	45 - 65
Specific gravity (25 deg C)	1.00 about
Equivalent to Schenectady (SII)	SP-1068

### Package & Notice

<b>Package</b> 25kg net in kraft/plastic woven bag	<b>20'FCL load</b> 15mt (600bags)	<b>20'FCL palletized</b> 14mt (560bags)
<b>HS code</b> 39094000	<b>CAS Number</b> unspecified	<b>EC# (EINECS)</b> unspecified
<b>Structural</b> macromolecule polymer	<b>Storage</b> In cool place, avoid fire and high temperature.	

## FRICITION PHENOLIC RESIN

### Property & Usage

**Megachem-Phenolic Resin For Friction Materials** is thermoplastic phenolic resin, modified phenolic resin formed by polycondensation of phenol and formaldehyde under the action of acid catalyst. has the characteristics of low free phenol content, high thermal decomposition temperature, low high-temperature thermal decay, good fluidity, strong infiltration ability to fibers and fillers, stable friction coefficient of products, strong thermal recovery ability and low wear.

Usage in disc brake pads, drum discs, clutch discs, brake bands, friction blocks, steel backing rubber, train brake shoes and industrial brake shoes on automobiles.

### Technical Data Sheet

FRICITION PHENOLIC RESIN	PH901	PH902	PH9019H
Appearance	light yellow powder	light yellow or pale reddish brown powder	light yellow or white powder
Polymerization speed (Sec/150 deg C)	70 – 120	65 – 110	60 – 110
Mobility (mm)	25 - 45	25 - 50	25 - 30
Urotropine content	8.0% - 9.5%	8.0% - 10.0%	8.2% - 9.2%
Free phenol content	3.5% max	3.5% max	3.5% max
Fineness (pass 200 mesh)	95% min.	95% min.	95% min.

### Package & Notice

<b>Package</b> 20/25kg net in kraft/plastic woven bag	<b>20'FCL load</b> 18mt (720bags)	<b>20'FCL palletized</b> 16mt (640bags)-pallet
<b>HS code</b> 39094000	<b>CAS Number</b> 9003-35-4/25085-50-1	<b>EC# (EINECS)</b> unspecified
<b>Structural</b> macromolecule polymer	<b>Storage</b> In cool place, avoid fire and high temperature.	