

## HIRENOL® KPR-1302

HIRENOL® KPR-1302 is a CNSL modified phenolic novolak resin having very low free phenol content and supplied in pastille form. It is used in synthetic and natural rubber based compounds as reinforcing resin, for instance in the bead area of tires and in some manufactured rubber goods. 7 ~ 15% of hexamethylene tetramine or another type of methylene donor should be added to make it thermosetting. For the good dispersion of resin and best reinforcing effect, it is recommended to incorporate the resin in the internal mixer after the rubber and the first half of carbon black, along with the second half of the carbon black. Accelerators and hexamethylene tetramine are generally added, after cooling, in a second step in order to avoid scorching.

\* Rate of Use : Generally 8 ~ 20 parts per 100 parts of rubber.

### Properties

Property	Specification	Remark
Appearance	Dark Reddish Pastille	
Softening Point	95 ~ 110℃	Ball & Ring Method(5℃/min)
Free Phenol Content	0.7% max.	
ASH Content	0.5% max.	800℃ × 2 hrs
Acetone Extractable	99% min.	

### Guide Formulation

	Part(by weight)
NR	60
BR	40
Carbon Black	80
Aromatic Oil	5
Stearic Acid	1.5
ZnO	7
Antioxidant	1
KPR-1302	15
HMTA	3
Insoluble Sulfur	2
MBS	0.8
Retarder(50%)	0.6

### Packing

The standard package for KPR-1302 is a multi-wall paper bag containing 20Kg net of resin. A package can be changed with special order.

### KOLON INDUSTRIES

Kolon Tower 9FL. 1-23, Byeoryang-Dong,  
Gwacheon-City, Gyeonggi-Do, South Korea  
Phone : 82-2-3677-6134 FAX : 82-2-3677-6189

#### IMPORTANT :

The information herein is accurate to our best but should be confirmed by buyer. We do not guarantee results from use of the product