

### TYPE

Carbamic resin

### FORM OF DELIVERY (f.o.d.)

65% active on silica

### USES

Plasticizing component and compatibility promoter for rubber compounds.

Reactive thinner for Bead and Apex compounds.

### PRODUCT DATA

The data are determined by our quality control for each lot (batch) before release.

#### Determined per batch:

#### Colour/Appearance

Appearance white free flowing powder

#### Ash content

1h - 800°C [%] 31 - 35

#### Particle size

Wet sieve test - through 80 Mesh [%] => 99,7

#### Content free formaldehyde

Formaldehyde [%] <= 0,1

#### Moisture content

Karl-Fischer [%] <= 4

### COMPATIBILITY AND DILUTABILITY

ALNOVOL UF 410 RPC is compatible with most of the synthetic and natural rubbers. Due to the silica carrier in solvents no clear solution possible.

### SPECIAL PROPERTIES AND USES

ALNOVOL UF 410 RPC has the properties of a plasticizer as well as of a soft resin. It contains no organic solvents. It is light-fast and heat resistant and stable against hydrolysis.

ALNOVOL UF 410 RPC can be used as replacement of processing oils in tire compounds like Bead and/or Apex compounds. It generates similar mixing and processing properties, but due to its reactive groups it is able to crosslink with resin hardeners and increases hardness during vulcanisation. Due to the crosslinking ALNOVOL UF 410 RPC has no negative impact on heat build-up. In case of resorcinol compounds it increases the vulcanisation speed additionally.

ALNOVOL UF 410 RPC is able to be used in NBR compounds also. In this case it works like a plasticizer.

### PROCESSING

ALNOVOL UF 410 RPC can be added to the internal mixer together with carbon black directly, but a partly or full dosage at the final mixing step is possible due to its easy incorporation too. It efficiently reduces Mooney viscosity. Because of its viscosity effect extrusion works well and shape and surface is improved.

If ALNOVOL UF 410 RPC is used as a replacement of oil a partner to develop the positive effects in specific compounds is needed. These are especially ALNOVOL® PN 320 (reinforcing resin), ALNOVOL® PN 760 (adhesion promoter) or any kind of resorcinol structure. As soon as hardeners like CYREZ® 964 or HMT are added to the compound processing temperature shouldn't stay too long above 125°C because of starting the crosslinking reaction of the resins.

### STORAGE

At temperatures up to 25°C storage stability of ALNOVOL UF 410 RPC in its original pack is standard 12 month.

The expiration date may be extended and COA updated after QC testing of retained samples, only for material in allnex possession.

### SAFETY AND HANDLING

Please consult the Safety Data Sheet (SDS) for safety, health, and environmental data available from allnex.