



# NeoBag

NeoBag is low temperature melting bag used to pack compounding ingredients which help to keep the mixing area clean.

## Advantages NeoBag over PE Bags.

NeoBag is made of low melting point, Low Crystallinity Syndiotactic 1, 2- Polybutadiene Resin (RB). RB has a low melting point as well as a low melt viscosity in comparison with Polyethylene. NeoBag begins melting at lower temperature which helps release additives faster into the compound thereby helping speed up mixing cycle leading to energy saving.

## Advantages NeoBag over EVA Bags

PE/EVA bags don't cure with sulfur hence remain in the compound as contaminant/undissolved particle which often are reason for failure of component. NeoBag form an integral part of Vulcanisate and doesn't remain as impurity in the system providing following advantages.

Parameters	EVA Bag	NeoBag
Melting point	80-100°C	80°C
Ease of Melting and dispersibility	Melts by higher Calorie ~71J/g	Melts by lower calorie ~25J/g
Curability with rubber	Doesn't cure in Sulphur / Accelerator system	Easily cured by both conventional Sulphur and Peroxide system
Crosslinking behaviour	Doesn't crosslinked in Vulcanised compound and remains as impurity	Produces cross link network structure with Rubber
State of identity inside polymer	Remains as unreactive unknown impurity, adversely affecting product life especially in thinner components like O-Rings, Oil Seals, Diaphragms, Hoses, Inner Liner etc...	It remains as an inseparable grafted network structure after vulcanization.
Influence of Tensile properties	May induce flaws due to its nonreactivity resulting in a chance of obtaining lower Tensile properties	It doesn't induce flaw and has the ability to enhances Tensile properties
Influence of Compression set	Not known	It is well known that Syndiotactic Polybutadiene acts as an effective co agent in Peroxide curing resulting in reducing compression set of the product
Influence of Dielectric properties	Remains as polar impurity and can reduce the volume resistivity of the product	There is no negative effect on Volume resistivity
Dynamic properties same thickness of bag	EVA has a poor Dynamic property. And Eva bags can adversely effect on dynamic properties	Polybutadiene improves dynamic properties of the final product
Puncture resistance on	Lower Puncture resistance	Higher Puncture resistance

