



# **STRUKTOL® RP 28**

**PROCESSING ADDITIVE**

**BLENDING AID**

## **COMPOSITION**

A mixture of light-colored aliphatic resins.

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## **TYPICAL PROPERTIES**

Appearance	Pale yellow pastilles
Ash Content (% max)	2
Softening Point (°C)	95 - 105
Specific Gravity	0.97
Physiological Behavior	Refer to safety data sheet
Storage Stability	at least 2 years under normal storage conditions
Packaging	Pastille: 55 lb PE bags Powder: 110 lb fiber drums

## **RECOMMENDATIONS FOR APPLICATION - RUBBER**

STRUKTOL® RP 28 improves the homogeneity of elastomers of different polarity and viscosity. It is rapidly absorbed by the polymers during the mixing cycle. A relatively low viscosity mass is quickly achieved into which other compounding ingredients can easily be incorporated. It is also particularly effective with those elastomer blends which tend to crumble at the beginning of the mixing cycle. The softening viscous resins wet the surface of the crumbs promoting the formation of a compact mass.

The reduction of compound viscosity and "nerve" achieved with STRUKTOL® RP 28 assists further processing. For instance, bagging tendency can be reduced, extrusion rates are increased without increasing the die swell, and calendering properties are improved. These benefits are retained even after long storage periods of the green compounds.

STRUKTOL® RP 28 increases the green tack of many compounds.

STRUKTOL® RP 28 does not harden during vulcanization. The hardness of the vulcanizate is not reduced as much as when using, for example, mineral oil plasticizers.

Because of its color, STRUKTOL® RP 28 is suitable for light colored compounds where non-staining is specified.

In most cases, STRUKTOL® RP 28 is added to the polymers within the mixing cycle. It also has solubility in aromatic and chlorinated hydrocarbons.

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**RECOMMENDATIONS FOR APPLICATION - PLASTICS**

At process temperatures, STRUKTOL® RP 28 melt has a natural tackiness and this "adhesive" nature enables it to act as an effective binder. This is important in polymers where high filler levels require the most uniform blending in order to maintain physical properties. In addition, the low molecular weight of STRUKTOL® RP 28 provides some viscosity reduction during processing which improves flow characteristics.

Many applications require a high level of uniform blending in the initial compounding stage. STRUKTOL® RP 28 has been shown to improve the blending of TPO compounds, flame retardant formulations and filled polymer systems. In many cases, this more homogenous blend results in better physical properties and fewer processing problems.

Low level additions of STRUKTOL® RP 28 can be very useful in improving the performance for a range of highly filled compounds. It has good solubility in aliphatic, aromatic and chlorinated hydrocarbons.

STRUKTOL® RP 28 is especially useful in processing recycled PVC offering improved mixing between materials of differing viscosity or incorporation of recycled into powdered virgin compound.

The benefits of STRUKTOL® RP 28 include:

- Aids in polymer blending
- Improves flow during molding
- Improved surface appearance
- Non-blooming
- FDA sanctioned

**DOSAGE**

In rubber, use at 4 – 15 phr.

In plastics, use 0.5 – 1.0%.

**FDA STATUS**

STRUKTOL® RP 28 is sanctioned for use by the Food and Drug Administration (FDA) listed in the following sections of Title 21 of the Code of Federal Regulations:

<b>172.280</b>	<b>177.1350</b>
<b>172.615</b>	<b>177.1390</b>
<b>175.105</b>	<b>177.1520</b>
<b>175.125</b>	<b>177.2600</b>
<b>175.300</b>	<b>178.1005</b>
<b>176.200</b>	<b>178.3750</b>
<b>176.210</b>	<b>178.3850</b>
<b>177.1200</b>	<b>178.3930</b>
<b>177.1210</b>	<b>179.45</b>