Vulkanol® VP RUC 9210

Function
Vulkanol® VP RUC 9210 is a general purpose polar plasticizer which improves low temperature flexibility.

Product description
Composition: mixture of thioesters and carboxylic acid esters
Appearance: light yellow liquid

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refractive index (at 20 °C)</td>
<td>1.45</td>
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<tr>
<td>Density (at 20 °C)</td>
<td>1.06</td>
<td>g/cm³</td>
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<tr>
<td>Viscosity (at 20 °C)</td>
<td>17</td>
<td>mPa.s</td>
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</tbody>
</table>

Use
Mode of action: Vulkanol® VP RUC 9210 is a general purpose polar plasticizer which improves low temperature flexibility particularly in rubber types which on their own have poor low temperature properties. It is used in products where a compromise is sought between cost and improvement in properties, such as hose, seals and other molded articles which must function at low temperature but no requirement for elevated temperature is imposed.

Processing: Vulkanol® VP RUC 9210 is easy to incorporate and disperses well in rubber compounds. It decreases scorch safety slightly in sulfur cured compounds. It is readily compatible up to the loading levels shown below.

Vulcanizate Properties: Vulkanol® VP RUC 9210 is an efficient plasticizer for rubber vulcanizates. Its inclusion reduces modulus hardness and tensile strength but increases ultimate elongation and resilience especially at ambient and lower temperatures. Vulcanizates including Vulkanol® VP RUC 9210 exhibit good resistance to compression set throughout a temperature range from very low to above ambient. In a typical sulfur cured nitrile rubber vulcanizate the inclusion of 20 phr of Vulkanol® VP RUC 9210 reduces the brittleness point from -23 °C to -34 °C.

Dosage: Typical levels of Vulkanol® VP RUC 9210 addition based on 100 parts by weight of elastomer are:

- NBR (e.g. Perbunan®, Krynac®) 30 phr
- CR (e.g. Baypren®) 30 phr
- NR 30 phr
- SBR (e.g. Buna® SE, Buna® VSL) 30 phr
- IIR < 20 phr
Packaging
60 kg plastic bunghole drum on 480 kg skid.

Storage stability
In original closed containers under cool (approximately 25 °C) and dry conditions 730 days from date of production.

Handling
For additional handling information on Vulkanol® VP RUC 9210 please consult current safety data sheet.

These raw material properties are typical and, unless specifically indicated otherwise, are not to be considered as delivery specification.

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