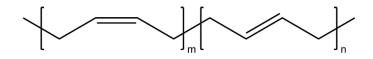


## **Technical Data Sheet**

| MATERIAL:            | Polybutadiene, cis and trans  |   |
|----------------------|---|---|
| CATALOG NUMBER:      | 052   |   |
| CAS NUMBER:          | 9003-17-2   |   |
| DESCRIPTION:         | Polybutadiene, mixed isomers  |   |
| FORMULA:             | $(C_4H_6)_x$  |   |
| TYPICAL PROPERTIES:  | Appearance:<br>Cis-1,4<br>Trans-1,4<br>Vinyl-1,2<br>Approx Mw:<br>Refractive index:<br>Density:<br>Mooney viscosity:<br>Glass transition temp:<br>Solubility parameter:<br>Solubility:  | Slab<br>36%<br>55%<br>9%<br>200,000<br>n <sub>D</sub> <sup>25</sup> 1.5167<br>0.90 (25°C)<br>51 (100°C)<br>-96°C<br>8.38<br>Aliphatic, aromatic and cycloaliphatic<br>hydrocarbons, THF |
| GENERAL INFORMATION: | Polybutadiene [butadiene rubber BR] is a synthetic rubber.<br>Polybutadiene rubber is a polymer formed from the polymerization of<br>the monomer 1,3-butadiene. Polybutadiene has a high resistance to wear<br>and is used especially in the manufacture of tires. Polybutadiene as also<br>used as an additive to improve the toughness (impact resistance) of<br>plastics such as polystyrene and acrylonitrile butadiene styrene (ABS). It<br>is also used to manufacture golf balls, various elastic objects and to coat<br>or encapsulate electronic assemblies, offering high electrical resistivity. |   |

## **STRUCTURE:**



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