



# TECHNICAL DATA SHEET

Compound :

NBR

Copolymer acrylonitrile / butadiene (with percentage of ACN from 18% up to 50% approx.)

ORIGINAL PROPERTIES : Analysis on supplier laboratory compound

Physical-mechanical properties	Unit of measurement	Requested
Hardness	Shore A	40 ÷ 90
Density	g/cm <sup>3</sup>	1,15 ÷ 1,50 *
Minimum temperature	° C	- 15 ÷ - 30 (- 40) **
Maximum temperature	° C	100 ÷ 110 * (130) **

<b>Physical-mechanical characteristics</b>	<p><i>Mechanical properties from very good to excellent *</i></p> <p><i>Resistance to permanent deformation from good to excellent *</i></p> <p><i>Good abrasion-resistance, rather high in the carboxyl types (XNBR)</i></p> <p><i>Rebound elasticity from poor to high *</i></p>
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<b>Other properties</b>	<p><i>Absence of toxicity **</i></p> <p><i>Good dyeing</i></p> <p><i>Air and gas impermeability from good to excellent *</i></p> <p><i>Poor UV radiation resistance</i></p> <p><i>Any flame resistance</i></p> <p><i>Poor dielectric properties</i></p>
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<b>Chemical compatibility</b>	<p><b>Excellent in contact with:</b></p> <ul style="list-style-type: none"> <li>- Oils and mineral, vegetable and animal greases</li> <li>- Aliphatics hydrocarbons * ** and fuels * **</li> <li>- Water ** and saline solutions</li> </ul>
	<p><b>Satisfactory in contact with:</b></p> <ul style="list-style-type: none"> <li>- Hydraulic fluids on the basis of fuel-oils and of silicic esters</li> <li>- Different kinds of freon</li> <li>- Alcohols (except the benzil)</li> <li>- Concentrated alkaline solutions up to 50°C *</li> </ul>
	<p><b>Satisfactory enough in contact with:</b></p> <ul style="list-style-type: none"> <li>- Diluted acid solutions</li> <li>- Xilene and toluene * **</li> <li>- Sintetic lubricants on the basis of diesters</li> </ul>
	<p><b>Insufficient in contact with:</b></p> <ul style="list-style-type: none"> <li>- Strong concentrated mineral acids, hot diluited alkaline solutions</li> <li>- Ozone and atmospheric agents (except with formulations containing protective agents)</li> <li>- Different brake fluids on the basis of not fuel-oils</li> <li>- Ketones and esters</li> <li>- Benzene and chloridated hydrocarbons</li> <li>- Hydraulic fluids on the basis of phosphoric esters</li> <li>- Phenol</li> </ul>

\* depending from the types

\*\* with a specific optimal formulation