A golf ball needs to have good dynamic properties. In order for the ball to fly several hundred yards and land where the player wants it to, with as little energy as possible lost when the golf club strikes the ball. This is where the right butadiene rubber found in the core of the golf ball comes into play.

The rebound elasticity is of crucial importance to rubber items, since it is an indicator of how economically the elastomer uses energy when it undergoes deformation. A good rebound elasticity means that a rubber item releases most of the mechanical energy put into it without being transformed into heat when it returns to its original shape after being subjected to a load.

ARLANXEO BUNA® CB high cis Neodymium and Cobalt Butadiene Rubber (BR) used in the cores of high-quality balls have very good rebound elasticity and are the polymers of choice for this application.

### ARLANXEO PRODUCT PROPERTIES

<table>
<thead>
<tr>
<th>High-Cis Neodymium BR</th>
<th>Mooney [ML(1+4) @ 100 °C, MU]</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUNA™ CB 22</td>
<td>63</td>
<td>highly linear</td>
</tr>
<tr>
<td>BUNA™ CB 24</td>
<td>44</td>
<td>linear</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>High-Cis Cobalt BR</th>
<th>Mooney [ML(1+4) @ 100 °C, MU]</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUNA™ CB 1221</td>
<td>53</td>
<td>branched</td>
</tr>
<tr>
<td>BUNA™ CB 1203</td>
<td>43</td>
<td>branched</td>
</tr>
<tr>
<td>BUNA™ CB 1220</td>
<td>40</td>
<td>highly branched</td>
</tr>
</tbody>
</table>

### KEY PARAMETERS

- **Compression**
  - Greater deformation under load due to lower modulus

- **Coefficient of Restitution (C.O.R)**
  - Indicator of distance due to energy lost
  
  \[
  C.O.R. = \frac{\text{rebound velocity}}{\text{approach velocity}}
  \]

*These items are provided as general information only. They are approximate values and are not considered part of the product specifications. Please contact your regional representative for additional information.*
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