

Description	Technical data	Test method	Value
<p>Solprene 411 is a 70/30 butadiene/styrene thermoplastic copolymer, polymerized in solution and has a radial structure.</p> <p>This product is available in:</p> <ul style="list-style-type: none"> <li>• Solprene 411 porous pellet.</li> <li>• Solprene 411M powder form dusted with calcium carbonate</li> </ul>	<p><b>Polymer Properties</b></p> <p>Total Styrene, %</p> <p>Toluene Solution Viscosity (at 5.23% and 25°C), cSt</p> <p>Volatile Matter, % max.</p> <p>Insoluble matter, %max.</p>	<p>ASTM D5775</p> <p>NM 300-11</p> <p>ASTM D5668</p> <p>NM 300-15</p>	<p>30</p> <p>28</p> <p>0.75</p> <p>0.1</p>
<b>Applications</b>	<b>Modified Asphalt Properties</b>	<b>Test method</b>	<b>Value</b>
<ul style="list-style-type: none"> <li>• Adhesives</li> <li>• Asphalt/Bitumen</li> <li>• Compounds</li> <li>• Roofing</li> </ul>	<p>In waterproof membranes (150/200 asphalt + 12% polymer)</p> <p>Softening Point Temperature, °C</p> <p>Penetration at 25°C, 1/10mm</p> <p>Viscosity at 180°C, cP</p> <p>Cold Flexibility Temperature, °C</p>	<p>ASTM D36</p> <p>ASTM D5-86</p> <p>ASTM D4402</p> <p>MA 04-5-009</p>	<p>&gt;130</p> <p>&lt;50</p> <p>2200</p> <p>&lt;-30</p>

June, 2022

## Description

Calprene 411 is a 70/30 butadiene/styrene thermoplastic copolymer, polymerized in solution and has a radial structure.

This product is available in:

- Calprene 411, porous crumb.
- Calprene 411C, porous pellet.
- Calprene 411M, powder form dusted with amorphous silica.

## Technical data

### Polymer Properties

Toluene solution viscosity, (5.23%,25 °C) ,cSt

### Test method

MA 04-3-003

### Value

26

Volatile matter, % max.

ASTM D5668

0.75

Total styrene (on polymer), %

MA-04-3-062

30

Insoluble matter in toluene (325 mesh), % max.

MA 04-3-018

0.1

*February, 2023*

## Applications

- Bitumen modification.
- Plastic modification.
- Technical compounds.
- Footwear.
- Adhesives and Sealants.