



## AUTOMOTIVE INDUSTRY

### Profile, solid, black

#### Profile for low temperature flexibility

75 Shore A, EPDM, sulfur cure

Specification BMW

Guide formulation of Exxon		M 849
Vistalon 3666		175.0
A-C 617		10.0
GPF N-660		170.0
SILLITIN N 82	)*	50.0
Zinc oxide		10.0
Stearic acid		2.0
Rhenogran CaO-80		5.6
PEG 4000		2.0
Sulfur		0.4
Vulkacit MOZ		2.2
TMTD		0.5
DTDM		0.5
DPTT		0.5
Total phr		428.7
Density	g/cm <sup>3</sup>	1.26

)\* No longer available. Recommended: SILLITIN N 75

#### Monsanto Rheometer, ± 5°, 180°C

ML, minimum	dNm	30.5
MH, maximum	dNm	100.6
ts <sub>2</sub>	min	1.5
tc <sub>90</sub>	min	5.2



M 849

**Physical properties****Press cure 6 min @ 180°C**

				<b>BMW Spec.</b>
Hardness		Shore A	74	75 ± 5
Modulus 100 %		MPa	4.6	
Tensile strength		MPa	9.7	≥ 8
Elongation at break		%	250	
Tear resistance	DIN ISO 34-1, B	N/mm	31	≥ 20

**Compression set**

22 h @ 100°C, 25 % defl.	ASTM B	%	41	≤ 60
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**Air aging, 144 h @ 100°C**

Hardness		Shore A	79	
Modulus 100 %		MPa	5.0	
Tensile strength		MPa	10.0	
Tear resistance (Graves)	DIN ISO 34-1, B	N/mm	24	

**Torsion modulus G as function of temperature**

G (23°C)		MPa	14	
G (0°C)		MPa	16	
G (-10°C)		MPa	19	
G (-20°C)		MPa	23	
G (-30°C)		MPa	43	
G (-50°C)		MPa	95	
G (-50°C)		MPa	850	
T <sub>(5)</sub>		°C	-48	≤ -45

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