



**AUTOMOTIVE INDUSTRY**

**Profile, sponge, black**

**Expanded part of snap-on-profile for bonnet and trunkseals, good collapse**

**Density 0.60 g/cm<sup>3</sup>, EPDM, sulfur cure / UHF cure**

Guide formulation of DSM (now Arlanxeo)	V 2658
Keltan 512x50 )*	120.0
Keltan 312 )**	20.0
Zinc oxide	5.0
Stearic acid	3.0
Durex 0	90.0
SILLITIN Z 86	55.0
Vaseline	10.0
Process Oil P 460 (ex Sunpar 2280)	30.0
Caloxol W3	4.0
MBT	1.0
TDEC	1.0
ZDMC	3.0
DBTU	3.0
Sulfur	1.5
Genitron CR	6.0
<b>Total phr</b>	<b>352.5</b>

)\* No longer available. Recommended: Keltan 4450 + 50 phr paraffin oil

)\*\* No longer available. Recommended: Keltan 2450

**Compound preparation**

**3-D Branbury mixer, volume 47.5 l**

Overload	%	10
Rotor speed	rpm	35
Mixing method:		
Polymer	min	0
Rest except Caloxol, accelerators, sulfur and blowing agent	min	1
Caloxol W3	min	3
Discharge	min	4
Indicated discharge temperature	°C	120

Fed to slab-off mill: accelerators, sulfur and blowing agent



V 2658

<b>Mooney Viscosity</b>	MU		62
ML (1+4) 100°C			
<b>Mooney Cure rate</b>			
V 30 120°C	MU		10.7
V 30 140°C	MU		31.6
<b>Rheometer</b>		<b>160°C</b>	<b>180°C</b>
Delta S	Nm	5.49	6.42
Optimum time	min	17.3	5.6
Scorch time	min	1.8	---



V 2658

**Berstorff Extruder Ø 90 mm 16D**

Extrusion conditions		with vacuum
Barrel	°C	40-40-50
Head	°C	50

**UHF curing, Hertz-four GLH FAT 2x2.5 kW**

Energy Magnetron I	A	0.33	0.5
Energy Magnetron II	A	0.33	0.5
Temperature in air tunnel (6 m)	°C	250	250

**Profile type**



Extrusion rate	m/min	7.5	12.5
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**Physical properties**

		original	post cured 2 h @ 130°C	original	post cured 2 h @ 130°C
Density	g/cm <sup>3</sup>	0.61	0.63	0.60	0.62
Water absorption	%	6.8	11.2	7.4	10.0
Tensile strength (profile)	MPa	2.2	---	2.0	---
Elongation at break	%	230	---	190	---

**Compression set**

100 h @ RT, after 5 min	%	19	15	18	18
100 h @ RT, after 60 min	%	13	12	13	12
100 h @ 70°C, after 5 min	%	60	42	60	41
100 h @ 70°C, after 60 min	%	61	40	59	38

**Compression deflection**

ASTM 1056	kg/20cm	3.0	3.7	3.1	3.6
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**Air aging, 48 h @ 70°C**

Tensile strength (profile)	MPa	2.0	---	1.9	---
Elongation at break	%	200	---	200	---

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