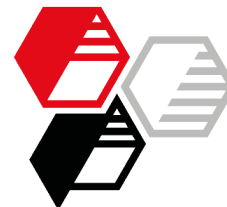
**OTHER APPLICATION****Extrusion, Profile, sponge, black****Density 0.50 g/cm³, EPDM, sulfur cure / UHF cure**

Guide formulation of DSM (now Arlanxeo)	V 1851
Keltan 512)*	100.0
Zinc oxide	5.0
Stearic acid	3.0
Durex 0	70.0
SILLITIN Z 86	55.0
Vaseline	10.0
Process Oil P 460 (ex Sunpar 2280)	50.0
Caloxol W3	4.0
MBT	1.0
TDEC	1.0
ZDMC	3.0
DBTU	3.0
Sulfur	1.5
Genitron CR	4.0
Total phr	310.5

)* No longer available. Recommended: Keltan 4450

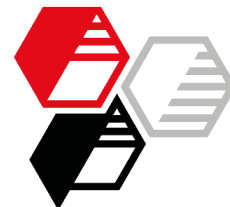
Compound preparation**3-D Branbury-Kneter, volume 47.5 l**

Overload	%	10
Rotor speed	rpm	35
Mixing method:		
Polymer	min	0
Rest except Caloxol, accelerators, sulfur and blowing agent	min	1
Caloxol W3	min	4
Discharge	min	5
Indicated discharge temperature	°C	120-125
Fed to slab-off mill: accelerators, sulfur and blowing agent		



V 1851

Mooney Viscosity			
ML (1+4) 100°C	MU	44	
Mooney Cure rate			
V 30 120°C	MU	10.7	
V 30 140°C	MU	30.0	
Rheometer		160°C	180°C
Delta S	Nm	6.37	5.82
Optimum time	min	18.2	6.7
Scorch time	min	2.1	1.5



V 1851

Berstorff Extruder Ø 90 mm 16D

Extrusion conditions

Barrel	°C	with vacuum
Head	°C	30-30-40
		40

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

Energy Magnetron I	A	0.35	0.45
Energy Magnetron II	A	0.35	0.45
Temperature in air tunnel (6 m)	°C	225	225

Profile type

		○	○
Height	mm	14.5	14.9
Inner diameter	mm	10.5	11.0
Extrusion rate	m/min	7.5	10.0

Physical properties

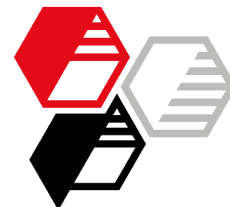
		original	post cured 3 h @ 130°C	original	post cured 3 h @ 130°C
Density	g/cm ³	0.57	0.62	0.54	0.54
Water absorption	%	0	0	0	0

Compression set

100 h @ RT, after 5 min	%	18	14	17	14
100 h @ RT, after 60 min	%	15	12	14	11
100 h @ 70°C, after 5 min	%	52	31	51	30
100 h @ 70°C, after 60 min	%	50	31	48	28

Compression deflection

ASTM 1056	kg/100mm	1.6	2.0	1.5	1.9
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V 1851

Berstorff Extruder Ø 90 mm 16D

Extrusion conditions

Barrel	°C	with vacuum
Head	°C	30-30-40
		40

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

Energy Magnetron I	A	0.40	0.50
Energy Magnetron II	A	0.40	0.50
Temperature in air tunnel (6 m)	°C	225	225

Profile type

Height	mm	11.6	12.6
Extrusion rate	m/min	7.5	10.0

Physical properties

		original	post cured 3 h @ 130°C	original	post cured 3 h @ 130°C
Density	g/cm ³	0.46	0.53	0.44	0.44
Water absorption	%	0	0	0	0

Compression set

100 h @ RT, after 5 min	%	51	21	60	29
100 h @ RT, after 60 min	%	45	16	55	24
100 h @ 70°C, after 5 min	%	84	37	89	44
100 h @ 70°C, after 60 min	%	83	36	89	40

Compression deflection

ASTM 1056	kg/m ² x10 ⁴	2.5	3.8	2.6	3.2
	kg/50mm	12.8	19.3	14.2	17.2

Our applications engineering advice and the information contained in this formulation are based on experience and are made to the best of our knowledge and belief, they must be regarded however as non-binding advice without guarantee. Working and employment conditions over which we have no control exclude any damage claim arising from the use of our data and recommendations. Furthermore we cannot assume any responsibility for patent infringements, which might result from the use of our information.