



OTHER APPLICATION

Extrusion, Profile, sponge, black

Density 0.80 g/cm³, EPDM, sulfur cure / UHF cure

Specification DIN 4060 (1988-12)

Guide formulation of DSM (now Arlanxeo)	V 2155
Keltan 512x50)*	150
Zinc oxide	5
Stearic acid	1
Durex 0	70
SILLITIN Z 86	55
Vaseline	10
Process Oil P 460 (ex Sunpar 2280)	20
MBT	1
TDEC	1
ZDMC	3
ZDBC	3
Sulfur	2
Genitron CR	1
Total phr	322

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

Compound preparation

3-D Branbury mixer, volume 47.5 l

Overload	%	5
Rotor speed	rpm	35
Mixing method:		
Polymer	min	0
Rest except accelerators, sulfur and blowing agent	min	1
Discharge	min	4
Indicated discharge temperature	°C	125

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



V 2155

Mooney Viscosity MU 62
ML (1+4) 100°C

Rheometer, 180°C
Delta S Nm 4.86
Optimum time min 5.2
Scorch time min 1.4

Troester Extruder Ø 90 mm 15D
Extrusion conditions with vacuum
Barrel °C 50-50-50
Head °C 60

UHF curing, Troester 2x5 kW
Energy Magnetron I A 0.5
Energy Magnetron II A ---
Temperature in air tunnel (10 m) °C 200

Profile type ●
Profile dimensions mm 35.4
Extrusion rate m/min 2.5

		original	post cured 3 h @ 130°C	DIN 4060
Physical properties				
Density	g/cm ³	0.82	0.81	≥ 0.65
Tensile strength	MPa	1.9	---	≥ 2.0
Elongation at break	%	360	---	≥ 350

Compression set				
22 h @ 70°C, 40 % deflection	%	34	14	≤ 20

Air aging, 7 d @ 70°C				
Tensile strength	MPa	2.2	---	---
Elongation at break	%	290	---	---
Δ Tensile strength	%	+15.8	---	≤ 15
Δ Elongation at break	%, rel.	-19.4	---	≤ 20

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