



MACHINERY and EQUIPMENT

Appliance, Hose, light-colored

Washing machine drain hose

80 Shore A, EPDM, sulfur cure

Guide formulation of DSM (now Arlanxeo)		V 5390
Keltan 578Z)*	100.0
Zinc oxide		5.0
Stearic acid		3.0
SILLITIN P 87		250.0
Mistron Vapor)**	35.0
Process Oil P 460 (ex Sunpar 2280)		50.0
Titanium dioxide		20.0
Paraffin wax		5.0
Dispergator DS		5.0
TMTD		2.0
ZDMC		3.0
ZDBC		3.0
DTDM		1.5
Sulfur		0.5
Total phr		483.0

)* No longer available. Recommended: Keltan 5470 or Keltan 5470Q

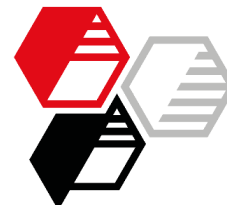
)** No longer available. Recommended: ImerFlex T10C

Compound preparation

3-D Branbury mixer

Volume load	%	90
Batch size	kg	67.4
Rotor speed	rpm	35
Mixing method:		
Polymer	min	0
Rest except accelerators and sulfur	min	1
Discharge	min	6.5
Indicated discharge temperature	°C	114

Fed to slab-off mill: accelerators and sulfur



V 5390

Mooney Viscosity

ML (1+4) 100°C	MU	85
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Monsanto Rheometer 1500S, 160°C

Delta S	Nm	5
Optimum time	min	13.0
Scorch time	min	2.7

Extrusion conditions

Barrel	°C	50-50-55-55
Head	°C	65
Compound extrusion temperature	°C	100-110
Extrusion rate	m/min	24

Profile type

Shape		ribbed hose
Inside diameter	mm	19
Outside diameter	mm	27

Physical properties

Hardness	Shore A	75
Tensile strength	MPa	6.4
Elongation at break	%	540

Compression set

24 h @ 70°C, 25 % deflection	%	25
24 h @ 100°C, 25 % deflection	%	45

Air aging

		3 d @ 70°C	3 d @ 120°C
Hardness	Shore A	81	83
Tensile strength	MPa	5.4	6.4
Elongation at break	%	475	250

Chemical resistance, 3 d @ 100°C

Water		good	
Prodixan, 15 g/l		Hardness +5	+5 max.
NaOH, 10 g/l		good	
Sodium-dichloro-isocyanurate, 0.1 g/l		good	
Bayer AS		Hardness +6	+5 max.

Miele
TLK 2007

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