

OTHER APPLICATION

Generally

Light-colored chloroprene formulation

70 Shore A, CR, metal oxide / ETU cure

Guide formulations of HOFFMANN MINERAL	M 505.0	1	2	3	4	5	6
Baypren 210		100.0	100.0	100.0	100.0	100.0	100.0
Stearic acid		1.0	1.0	1.0	1.0	1.0	1.0
SILLITIN V 85		100.0	---	---	---	---	---
SILLITIN N 85		---	100.0	---	---	---	---
SILLITIN Z 86		---	---	100.0	---	---	---
SILLITIN P 87		---	---	---	100.0	---	---
AKTISIL MM		---	---	---	---	100.0	---
AKTISIL PF 216		---	---	---	---	---	100.0
Mediaplast NB 4		10.0	10.0	10.0	10.0	10.0	10.0
Maglite DE		4.0	4.0	4.0	4.0	4.0	4.0
Zinkoxyd aktiv		5.0	5.0	5.0	5.0	5.0	5.0
ETU 80 %		1.2	1.2	1.2	1.2	1.2	1.2
Total phr		221.2	221.2	221.2	221.2	221.2	221.2

Mooney Viscosity

ML (1+4) 120°C	DIN 53523, T3	MU	49	51	52	56	55	55
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Mooney Scorch

ML (5 MU) 120°C	DIN 53523, T4	min	7.35	7.17	7.70	8.23	8.87	7.00
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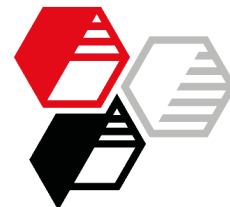
Rotorless curemeter, 180°C

t ₅	DIN 53529, T3	min	0.75	0.75	0.73	0.73	0.72	0.65
t ₉₀	DIN 53529, T3	min	5.20	4.85	4.87	4.93	5.90	4.78

Schwabenthan extruder Polytest 30R, Ø 30 mm 15D

Extrusion Garvey profile, ASTM D 2230 A, extrusion rate 1 m/min

Torque		Nm	130	130	140	140	140	90
Garvey 1. digit: swelling			2	2	2	2	2	2
Garvey 2. digit: 30° edge			2	2	3	4	3	3
Garvey 3. digit: surface			3	3	4	4	4	4
Garvey 4. digit: corners			2	3	4	4	3	3



			M 505.0	1	2	3	4	5	6
Physical properties									
Press cure @ 180°C				5.7 min	5.3 min	5.4 min	5.4 min	6.5 min	5.3 min
Density	DIN EN ISO 1183-1	g/cm³	1.647	1.647	1.648	1.646	1.640	1.644	
Hardness	DIN ISO 7619-1	Shore A	68	68	69	69	70	69	
Modulus 100 %	DIN 53504, S2	MPa	2.9	3.1	3.4	3.3	5.1	4.6	
Modulus 300 %	DIN 53504, S2	MPa	4.2	4.7	5.0	5.2	---	10.5	
Modulus 500 %	DIN 53504, S2	MPa	7.9	8.5	8.7	8.6	---	---	
Tensile strength	DIN 53504, S2	MPa	9.4	9.8	10.0	10.1	11.1	11.1	
Elongation at break	DIN 53504, S2	%	550	540	540	550	290	360	
Rebound	DIN 53512	%	58	58	56	56	60	58	
Tear resistance	DIN ISO 34-1, A	N/mm	7.0	7.9	8.8	10.6	6.1	6.9	
Abrasion	DIN ISO 4649	mm³	350	345	325	315	230	235	
Compression set	DIN ISO 815, B								
24 h @ 70°C		%	25	25	27	29	15	15	
24 h @ 100°C		%	36	37	38	40	24	27	
72 h @ 70°C		%	33	35	37	39	21	22	
Air aging, 168 h @ 100°C, DIN 53508									
Hardness		Shore A	75	75	75	75	74	75	
Modulus 100 %		MPa	5.1	5.8	6.1	6.7	7.5	7.7	
Tensile strength		MPa	5.9	6.7	6.8	7.4	10.6	10.3	
Elongation at break		%	270	280	280	280	190	200	
Rebound		%	61	61	60	59	62	61	
Tear resistance	DIN ISO 34-1, A	N/mm	5.1	5.2	5.3	5.3	4.2	3.4	
Immersion in ASTM Oil 2, 168 h @ 125°C, DIN 53521									
Hardness (S2 specimen)		Shore A	52	53	53	53	59	57	
Modulus 100 %		MPa	2.0	2.2	2.2	2.3	4.5	3.8	
Modulus 300 %		MPa	2.9	3.0	3.1	3.2	9.2	8.7	
Modulus 500 %		MPa	---	---	---	10.1	---	---	
Tensile strength		MPa	9.5	10.1	10.4	11.1	10.0	10.1	
Elongation at break		%	490	490	480	500	300	360	
Tear resistance	DIN ISO 34-1, A	N/mm	2.8	3.2	3.5	4.2	3.0	3.4	
Δ Weight		%	+18	+18	+19	+19	+17	+17	
Δ Volume		%	+31	+32	+32	+32	+29	+30	

More information on this topic:

[Non black fillers in CR](#)

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