



SPECIAL TOPICS

Silicone rubber compounds with Aktisil Q

Curing agent "Dicumyl peroxide"

40-75 Shore A, Q, peroxide cure

Guide formulations of HOFFMANN MINERAL	M 608.5	29	30	31	32	33
Elastosil R 401/40		100.0	100.0	100.0	100.0	100.0
AKTISIL Q		---	25.0	50.0	75.0	100.0
Perkadox BC-40S-ps		0.99	0.99	0.99	0.99	0.99
Total phr		100.99	125.99	150.99	175.99	200.99
Density	g/cm ³	1.12	1.26	1.38	1.48	1.56

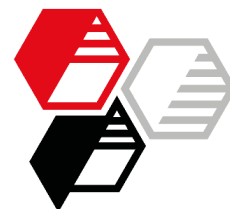
Physical properties

Press cure 5 min @ 180°C

Hardness	DIN ISO 7619-1	Shore A	39	49	56	64	73
Modulus 100 %	DIN 53504, S2	MPa	0.7	1.2	1.9	2.8	3.8
Tensile strength	DIN 53504, S2	MPa	10.8	9.5	8.9	8.5	8.2
Elongation at break	DIN 53504, S2	%	700	560	405	300	225
Rebound	DIN 53512	%	50	54	52	52	47
Tear resistance	DIN ISO 34-1, A	N/mm	11.6	3.7	2.7	1.6	1.3
Compression set 24 h @ 175°C	DIN ISO 815, B	%	18	12	11	13	17

Post cure 4 h @ 200°C

Hardness		Shore A	40	50	57	65	73
Modulus 100 %		MPa	0.8	1.3	1.9	2.9	3.4
Tensile strength		MPa	11.1	8.7	8.5	8.0	7.2
Elongation at break		%	770	510	410	305	210
Rebound		%	54	54	50	47	41
Tear resistance		N/mm	10.2	4.4	2.9	1.9	1.6
Compression set 24 h @ 175°C		%	17	12	13	16	20



	M 608.5	29	30	31	32	33
Immersion in reference oil IRM 903, 72 h @ 150°C, post cured specimen						
Δ Hardness	Shore A	-21	-22	-23	-24	-26
Δ Modulus 100 %	%	-1	+2	+6	+3	+1
Δ Tensile strength	%	-69	-43	-26	-16	-14
Δ Elongation at break	%, rel.	-54	-43	-27	-9	-7
Δ Weight	%	+52	+39	+31	+25	+22
Δ Volume	%	+64	+54	+46	+41	+37

Without post-cure, AKTISIL Q attains a marginally higher increase of volume and weight of about 1 to 2 %.

More information on this topic:

[Neuburg Siliceous Earth in High Consistency Silicone Rubber](#)

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