

50%NaOH compatibility with AFLAS®



Test method Soaked into the fluid at 70°C for 168h & 720h.
Test fluid 50%NaOH
Test piece AFLAS® 100S (standard formulation)

Formulation

AFLAS® 100S	100
MT-Carbon(N990)	30
TAIC	5
Parkadox® 14	1
Sodium Stearate	1

(phr)

Cure Conditions

Press molded at 170C for 20min
 Post cured at 200C for 4h

Properties (before test)	AFLAS® 100S	FKM (polyol cure)	FKM (peroxide cure)
Tensile strength [MPa]	22	14	19
Tensile Elongation [%]	222	173	290
Hardness [shore-A]	72	86	68

50%NaOH compatibility 70 °C for 168 hours	AFLAS® 100S	FKM (polyol cure)	FKM (peroxide cure)
Change of Tensile Strength [%]	2	-20	9
Change of Tensile Elongation [%]	8	-3	10
Change in Hardness [points]	1	-4	-1
Volume change [%]	-0.5	-7.4	-1.8

50%NaOH compatibility 70 °C for 720 hours	AFLAS® 100S	FKM (polyol cure)	FKM (peroxide cure)
Change of Tensile Strength [%]	0	-64	-8
Change of Tensile Elongation [%]	0	-16	2
Change in Hardness [points]	0	-12	-2
Volume change [%]	-1.1	-33.9	-7.2

* Triallylisocyanurate

** 1,3-bis(t-butylperoxy)-diisopropylbenzene. Perkadox® is a registered trademark of Akzo Nobel Chemicals B.V.