

Steam compatibility with AFLAS®



Test method Soaked into the fluid at 180°C for 168h & 720h.
Test fluid Steam
Test piece AFLAS® 100S (standard formulation)

Formulation	AFLAS® 100S	100
	MT-Carbon(N990)	30
	TAIC*	5
	Perkadox® 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
Tensile strength [MPa]	22.2	14.0
Tensile Elongation [%]	222	173
Hardness [shore-A]	72	86

Steam compatibility 180 °C for 168 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-11	-34
Change of Tensile Elongation [%]	8	46
Change in Hardness [points]	-4	-11
Volume change [%]	9.3	14.8

Steam compatibility 180 °C for 720 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-10	-49
Change of Tensile Elongation [%]	4	47
Change in Hardness [points]	-3	-15
Volume change [%]	10.8	20.4

* Triallylisocyanurate

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