

Hot water compatibility with AFLAS®



Test method Soaked into the fluid at 180°C for 168h & 720h.
Test fluid Hot water
Test piece AFLAS® 150E (standard formulation)

Formulation	AFLAS® 150E	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® 150E	FKM
Tensile strength [MPa]	14.3	14.0
Tensile Elongation [%]	297	173
Hardness [shore-A]	72	86

Hot water compatibility 180 °C for 168 hours	AFLAS® 150E	FKM
Change of Tensile Strength [%]	-3	-47
Change of Tensile Elongation [%]	5	24
Change in Hardness [points]	-4	-16
Volume change [%]	14.6	23.8

Hot water compatibility 180 °C for 720 hours	AFLAS® 150E	FKM
Change of Tensile Strength [%]	-9	-83
Change of Tensile Elongation [%]	3	-42
Change in Hardness [points]	-5	-28
Volume change [%]	19.9	103.1

* Triallylisocyanurate

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