

## Hot water compatibility (specific formulation) with AFLAS®



**Test method** Soaked into the fluid at 180°C for 168h, 720h & 3000h.  
**Test fluid** Hot water  
**Test piece** AFLAS® 150P (Steam & Hot water resistant formulation)

Formulation	AFLAS® 150P	100
	MT-Carbon(N990)	30
	TAIC*	5
	Perkadox® 14**	1
	Calcium Stearate	1

(phr)

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

Properties (before test)	AFLAS® 150P Hot water resist form	FKM
Tensile strength [MPa]	17.4	14.0
Tensile Elongation [%]	306	173
Hardness [shore-A]	72	86

Hot water compatibility 180 °C for 168 hours	AFLAS® 150P Hot water resist form	FKM
Change of Tensile Strength [%]	-21	-47
Change of Tensile Elongation [%]	14	24
Change in Hardness [points]	-2	-16
Volume change [%]	1.4	23.8

Hot water compatibility 180 °C for 720 hours	AFLAS® 150P Hot water resist form	FKM
Change of Tensile Strength [%]	-20	-83
Change of Tensile Elongation [%]	11	-42
Change in Hardness [points]	-2	-28
Volume change [%]	1.4	103.1

Hot water compatibility 180 °C for 3000 hours	AFLAS® 150P Hot water resist form	FKM
Change of Tensile Strength [%]	-24	-83
Change of Tensile Elongation [%]	7	-42
Change in Hardness [points]	-3	-28
Volume change [%]	2.4	103.1

\* Triallylisocyanurate

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