

# Hydrogen Peroxide compatibility with AFLAS®



**Test method** Soaked into the fluid at 80°C for 72h, 168h, and 504h.  
**Test fluid** 100% Hydrogen Peroxide (H2O2)  
**Test piece** AFLAS® 100S (standard formulation)

<b>Formulation</b>	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	ref. 2-FKM(polyol)
Tensile strength [MPa]	20	14
Tensile Elongation [%]	239	212
Hardness [shore-A]	69	78

Hydrogen Peroxide compatibility 25 °C for 72 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	0	-6
Change of Tensile Elongation [%]	8	3
Change in Hardness [points]	2	2
Volume change [%]	-0.7	-1

Hydrogen Peroxide compatibility 25 °C for 168 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	0	-4
Change of Tensile Elongation [%]	10	2
Change in Hardness [points]	0	-4
Volume change [%]	-0.1	-1

Hydrogen Peroxide compatibility 25 °C for 504 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	-8	-4
Change of Tensile Elongation [%]	0	2
Change in Hardness [points]	1	-3
Volume change [%]	0.2	1

\* Triallylisocyanurate

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