

# Acetic Hydroperoxide compatibility with AFLAS®



**Test method** Soaked into the fluid at 25°C for 72h, 168h and 504h.  
**Test fluid** Acetic Hydroperoxide  
**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

Acetic Hydroperoxide compatibility 25 °C for 72 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile strength [%]	-7	-40
Change of Tensile Elongation [%]	8	5
Change in Hardness [points]	1	-11
Volume change [%]	1	16

Acetic Hydroperoxide compatibility 25 °C for 168 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile strength [%]	-7	-56
Change of Tensile Elongation [%]	18	8
Change in Hardness [points]	-1	-25
Volume change [%]	3	38

Acetic Hydroperoxide compatibility 25 °C for 504 hours	AFLAS® 100S	ref. 2-FKM(polyol)
Change of Tensile strength [%]	-12	deterioration
Change of Tensile Elongation [%]	27	deterioration
Change in Hardness [points]	-5	deterioration
Volume change [%]	8	deterioration

\* Triallylisocyanurate

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

Acetic Hydroperoxide : CH<sub>3</sub>COOOH