

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® 150P (standard formulation)

Formulation	AFLAS® 150P	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® 150P	ref. 2-FKM(polyol)
Tensile strength [MPa]	17	14
Tensile Elongation [%]	263	212
Hardness [shore-A]	67	78

Hydrogen Peroxide compatibility 25 °C for 72 hours	AFLAS® 150P	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	3	-6
Change of Tensile Elongation [%]	19	3
Change in Hardness [points]	-2	2
Volume change [%]	-1.4	-1

Hydrogen Peroxide compatibility 25 °C for 168 hours	AFLAS® 150P	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	-2	-4
Change of Tensile Elongation [%]	10	2
Change in Hardness [points]	-1	-4
Volume change [%]	0.1	-1

Hydrogen Peroxide compatibility 25 °C for 504 hours	AFLAS® 150P	ref. 2-FKM(polyol)
Change of Tensile Strength [%]	-3	-4
Change of Tensile Elongation [%]	11	2
Change in Hardness [points]	1	-3
Volume change [%]	-0.9	1

* Triallylisocyanurate

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