

# 50% Sodium hydroxide solution compatibility with AFLAS®



**Test method** Soaked into the fluid at 100°C for 70 hours  
**Test fluid** 50% sodium hydroxide solution (50% NaOH)  
**Test piece** AFLAS® 100S

<b>Formulation</b>	AFLAS® 100S	100
	MT-Carbon(N990)	20
	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	FKM
Tensile strength [MPa]	24	17
Tensile Elongation [%]	270	270
Hardness [shore-A]	65	73

50% Sodium hydroxide solution compatibility 100 °C for 70 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-9	decomposition
Change of Tensile Elongation [%]	-11	decomposition
Change in Hardness [points]	-1	decomposition
Volume change [%]	0.1	decomposition

\* Triallylisocyanurate

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