

Gear Oil (Stauffer Blend 7700) compatibility with AFLAS®



Test method Soaked into the fluid at 175°C for 200h, 500h & 1000h
Test fluid Gear Oil (Stauffer Blend 7700)
Test piece AFLAS® 100S (standard formulation)

Formulation	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	FKM
Tensile strength [MPa]	23.7	13.7
Tensile Elongation [%]	240	200
Hardness [shore-A]	72	79

Stauffer Blend 7700 compatibility 175 °C for 200 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-35	-27
Change of Tensile Elongation [%]	-18	-14
Change in Hardness [points]	-17	-11
Volume change [%]	22	15

Stauffer Blend 7700 compatibility 175 °C for 500 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-34	-26
Change of Tensile Elongation [%]	-12	-15
Change in Hardness [points]	-14	-11
Volume change [%]	21	17

Stauffer Blend 7700 compatibility 175 °C for 1000 hours	AFLAS® 100S	FKM
Change of Tensile Strength [%]	-38	-36
Change of Tensile Elongation [%]	-11	-11
Change in Hardness [points]	-18	-19
Volume change [%]	20	24

* Triallylisocyanurate

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