

Diesel Oil CD class compatibility with AFLAS®



Test method Soaked into the fluid at 175°C for 200h & 500h.
Test fluid Diesel Oil CD class
Test piece AFLAS® 100S (standard formulation)

Formulation	AFLAS® 100S	100
	MT-Carbon(N990)	30
	TAIC*	5
	Parkadox® 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 (polyol cure)	FKM (peroxide cure)
Tensile strength [MPa]	23	13	24
Tensile Elongation [%]	236	197	354
Hardness [shore-A]	72	79	67

Diesel oil CD class compatibility 175 °C for 200 hours	AFLAS® 100S	FKM (polyol cure)	FKM (peroxide cure)
Change of Tensile Strength [%]	-11.8	-30.7	-53.7
Change of Tensile Elongation [%]	-10.2	-40.6	-31.6
Change in Hardness [points]	-3	0	1
Volume change [%]	7.9	3.7	0.7

Diesel oil CD class compatibility 175 °C for 500 hours	AFLAS® 100S	FKM (polyol cure)	FKM (peroxide cure)
Change of Tensile Strength [%]	-3.8	-27	-53.3
Change of Tensile Elongation [%]	-10.2	-49.2	-33.1
Change in Hardness [points]	-7	1	1
Volume change [%]	7.5	0.9	1

* Triallylisocyanurate

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