

IRM 903 Oil compatibility with AFLAS®



Test method Soaked into the fluid at 150°C for 168h, 500h & 1000h.
Test fluid IRM 903 Oil
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
Tensile strength [MPa]	20
Tensile Elongation [%]	230
Hardness [shore-A]	72

IRM 903 Oil compatibility 150 °C for 168 hours	AFLAS® 100S
Change of Tensile Strength [%]	-11
Change of Tensile Elongation [%]	-2
Change in Hardness [points]	-8
Volume change [%]	+12.6

IRM 903 Oil compatibility 150 °C for 500 hours	AFLAS® 100S
Change of Tensile Strength [%]	-9
Change of Tensile Elongation [%]	0
Change in Hardness [points]	-9
Volume change [%]	+13.3

IRM 903 Oil compatibility 150 °C for 1000 hours	AFLAS® 100S
Change of Tensile Strength [%]	-12
Change of Tensile Elongation [%]	+1
Change in Hardness [points]	-10
Volume change [%]	+13.1

* Triallylisocyanurate

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