IRM 903 Oil compatibility with AFLAS®

Test method Soaked into the fluid at 150℃ for 168h, 500h & 1000h.

Test fluid IRM 903 Oil

Test piece AFLAS® 100H (standard formulation)

Formulation

AFLAS® 100H	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® 100H
Tensile strength [MPa]	21
Tensile Elongation [%]	300
Hardness [shore-A]	72

IRM 903 Oil compatibility 150 ℃ for 168 hours	AFLAS® 100H
Chang of Tensile Strength [%]	**-10**
Change of Tensile Elongation [%]	**+8**
Change in Hardness [points]	**-10**
Volume change [%]	**+12.7**

IRM 903 Oil compatibility 150 ℃ for 500 hours	AFLAS® 100H
Chang of Tensile Strength [%]	**-11**
Change of Tensile Elongation [%]	**+17**
Change in Hardness [points]	**-10**
Volume change [%]	**+13.5**

IRM 903 Oil compatibility 150 ℃ for 1000 hours	AFLAS® 100H
Chang of Tensile Strength [%]	**-15**
Change of Tensile Elongation [%]	**+9**
Change in Hardness [points]	**-11**
Volume change [%]	**+13.4**

* Triallylisocyanurate

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