KOH 48% aq compatibility with AFLAS®

Test method Soaked into the fluid at 90℃ for 168h, 700h & 4200h.

Test fluid KOH 48% aq

Test piece AFLAS® 150P (standard formulation)

Formulation

AFLAS® 150P	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® 150P
Tensile strength [MPa]	**14**
Tensile Elongation [%]	**412**
Hardness [shore-A]	**67**

KOH 48% aq compatibility 90 ℃ for 168 hours	AFLAS® 150P
Chang of Tensile Strength [%]	**6**
Change of Tensile Elongation [%]	**-14**
Change in Hardness [points]	**1**
Volume change [%]	**1.8**

KOH 48% aq compatibility 90 ℃ for 700 hours	AFLAS® 150P
Chang of Tensile Strength [%]	**8**
Change of Tensile Elongation [%]	**-14**
Change in Hardness [points]	**-3**
Volume change [%]	**1.3**

KOH 48% aq compatibility 90 ℃ for 4200 hours	AFLAS® 150P
Chang of Tensile Strength [%]	**0**
Change of Tensile Elongation [%]	**-11**
Change in Hardness [points]	**2**
Volume change [%]	**1**

* Triallylisocyanurate

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