28% Aquaous ammonium compatibility with AFLAS®

Test method Soaked into the fluid at 70℃ for 168h & 720h.
Test fluid 28% Aquaous ammonium
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	FKM (polyol cure)	FKM (peroxide cure)
Tensile strength [MPa]	21.4	14.0	19.1
Tensile Elongation [%]	259	173	290
Hardness [shore-A]	72	86	68

28% Aquaous ammonium compatibility 70 ℃ for 168 hours	AFLAS® 100H	FKM (polyol cure)	FKM (peroxide cure)
Chang of Tensile Strength [%]	**-15**	decomposition	decomposition
Change of Tensile Elongation [%]	**0**	decomposition	decomposition
Change in Hardness [points]	**-2**	decomposition	decomposition
Volume change [%]	**0.6**	decomposition	decomposition

28% Aquaous ammonium compatibility 70 ℃ for 720 hours	AFLAS® 100H	FKM (polyol cure)	FKM (peroxide cure)
Chang of Tensile Strength [%]	**-15**	decomposition	decomposition
Change of Tensile Elongation [%]	**0**	decomposition	decomposition
Change in Hardness [points]	**-2**	decomposition	decomposition
Volume change [%]	**-0.6**	decomposition	decomposition

* Triallylisocyanurate

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