Hydrochloric acid 20%aq compatibility with AFLAS®

Test method Soaked into the fluid at 70℃ for 168h.
Test fluid Hydrochloric acid 20%aq (20%aq HCl)
Test piece AFLAS® 200P (standard formulation)

Formulation

AFLAS® 200P	100
MT-Carbon(N990)	25
TAIC*	5
Perkadox® 14**	1
MgO (highly active)	3
Sodium Stearate	1

(phr)

Cure Conditions Press molded at 170C for 20min
Post cured at 230C for 24h

Properties (before test)	**AFLAS® 200P**	**FKM (polyol cure)**	**FKM (peroxide cure)**
Tensile strength [MPa]	16.1	14.0	19.1
Tensile Elongation [%]	260	173	290
Hardness [shore-A]	66	86	68

Hydrochloride 20%aq compatibility 70 ℃ for 168 hours	**AFLAS® 200P**	**FKM (polyol cure)**	**FKM (peroxide cure)**
Chang of Tensile Strength [%]	**7**	-3	7
Change of Tensile Elongation [%]	**9**	11	10
Change in Hardness [points]	**-1**	1	0
Volume change [%]	**0.6**	1.7	-0.2

* Triallylisocyanurate

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