

Electrolyte (r.t.) compatibility with AFLAS®



Test method Soaked into the fluid at room temperature for 144 hours.
Test fluid Ethylcarbonate + Diethylcarbonate = 50 + 50 wt% (Electrolyte)
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	FKM (polyol cure)	FKM (peroxide cure)
Tensile Strength [MPa]	16.1	15.1	23.2
Tensile Elongation [%]	320	220	318
Hardness [shore-A]	67	69	66

Electrolyte compatibility r.t. for 144 hours	AFLAS® 150P	FKM (polyol cure)	FKM (peroxide cure)
Change of Tensile Strength [%]	-38	-83	-75
Change of Tensile Elongation [%]	-13	-86	-47
Change in Hardness [points]	-20	-12	-13
Volume change [%]	19	147	40

* Triallylisocyanurate

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