

Bio Diesel Fuel compatibility with AFLAS



Test method Soaked into Bio Diesel Fuel at 40C for 70h.
Test fluid Bio diesel fuel made from recycle oil (waste cooking oil)
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	Silicone rubber
Tensile strength [MPa]	16.2	6.8
100% Modulus [MPa]	5.8	5.0
Tensile Elongation [%]	321	165
Hardness [shore-A]	73	71
Specific gravity	1.59	1.32

Bio Diesel Fuel compatibility 40 °C for 70 hours	AFLAS 150P	Silicone rubber
Tensile strength [MPa]	15.0	5.7
100% Modulus [MPa]	4.0	4.4
Tensile Elongation [%]	335	137
Hardness [shore-A]	70	59
Change of Tensile strength [%]	-8	-17
Change of 100% Modulus [%]	-31	-11
Change of Tensile Elongation [%]	4	-17
Change in Hardness [points]	-3	-12
Volume change [%]	3	17

* Triallylisocyanurate

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