

Ethylene Glycol + PBT compatibility with AFLAS®



Test method Soaked into the fluid at 150C for 168 hours.
Test fluid Ethylene Glycol 30% aq + 0.5 % 3-(2-Benzothiazolytio)propionic acid (Sanbit PBT)
Test piece AFLAS® 100S (standard formulation)

Formulation

| | |
|-----------------|-----|
| AFLAS® 100S | 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® 100S |
|--------------------------|-------------|
| Tensile Strength [MPa] | 21.0 |
| Tensile Elongation [%] | 233 |
| Hardness [shore-A] | 72 |

| Ethylene Glycol + PBT compatibility 150C for 168 hours | AFLAS® 100S |
|---|-------------|
| Change of Tensile Strength [%] | -6 |
| Change of Tensile Elongation [%] | 15 |
| Change in Hardness [points] | -4 |
| Volume change [%] | 8 |

* Triallylisocyanurate

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