

Hot water compatibility with AFLAS®



Test method Soaked into the fluid at 180°C for 168h & 720h.
Test fluid Hot water
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 |
|--------------------------|-------------|------|
| Tensile strength [MPa] | 21.4 | 14.0 |
| Tensile Elongation [%] | 259 | 173 |
| Hardness [shore-A] | 72 | 86 |

| Hot water compatibility 180 °C for 168 hours | AFLAS® 100H | FKM |
|---|-------------|------|
| Change of Tensile Strength [%] | -11 | -47 |
| Change of Tensile Elongation [%] | 8 | 24 |
| Change in Hardness [points] | -6 | -16 |
| Volume change [%] | 16.2 | 23.8 |

| Hot water compatibility 180 °C for 720 hours | AFLAS® 100H | FKM |
|---|-------------|-------|
| Change of Tensile Strength [%] | -10 | -83 |
| Change of Tensile Elongation [%] | 3 | -42 |
| Change in Hardness [points] | -7 | -28 |
| Volume change [%] | 21.2 | 103.1 |

* Triallylisocyanurate

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