

28% Aquaous ammonium compatibility with AFLAS®



Test method Soaked into the fluid at 70°C for 168h & 720h.
Test fluid 28% Aquaous ammonium
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 200C for 4h

| Properties (before test) | AFLAS® 200P | FKM (polyol cure) | FKM (peroxide cure) |
|--------------------------|-------------|-------------------|---------------------|
| Tensile strength [MPa] | 16 | 14 | 19 |
| Tensile Elongation [%] | 260 | 173 | 290 |
| Hardness [shore-A] | 66 | 86 | 68 |

| 28% Aquaous ammonium compatibility 70 °C for 168 hours | AFLAS® 200P | FKM (polyol cure) | FKM (peroxide cure) |
|---|-------------|-------------------|---------------------|
| Change of Tensile Strength [%] | -38 | decomposition | decomposition |
| Change of Tensile Elongation [%] | -49 | decomposition | decomposition |
| Change in Hardness [points] | -3 | decomposition | decomposition |
| Volume change [%] | 62.8 | decomposition | decomposition |

| 28% Aquaous ammonium compatibility 70 °C for 720 hours | AFLAS® 200P | FKM (polyol cure) | FKM (peroxide cure) |
|---|-------------|-------------------|---------------------|
| Change of Tensile Strength [%] | -39 | decomposition | decomposition |
| Change of Tensile Elongation [%] | -59 | decomposition | decomposition |
| Change in Hardness [points] | -5 | decomposition | decomposition |
| Volume change [%] | 144.5 | decomposition | decomposition |

* Triallylisocyanurate

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