# 1% acetic acid compatibility with AFLAS®

**Test method** Soaked into the fluid at 40℃ for 72h & 168h and 80℃ for 72h & 168h.
**Test fluid** 1% acetic acid
**Test piece** AFLAS® 150P

**Formulation**

| | |
|---|---|
| AFLAS® 150P | 100 |
| MT-Carbon(N990) | 25 |
| 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 |
|---|---|---|
| Tensile strength [MPa] | 18 | 13 |
| Tensile Elongation [%] | 305 | 250 |
| Hardness [shore-A] | 66 | 71 |

| 1% acetic acid compatibility 40 ℃ for 72 hours | AFLAS® 150P | FKM |
|---|---|---|
| **Chang of Tensile Strength [%]** | **0** | -1 |
| **Change of Tensile Elongation [%]** | **-1** | 0 |
| **Change in Hardness [points]** | **2** | -3 |
| **Volume change [%]** | **0.6** | 11.3 |

| 1% acetic acid compatibility 40 ℃ for 168 hours | AFLAS® 150P | FKM |
|---|---|---|
| **Chang of Tensile Strength [%]** | **0** | -8 |
| **Change of Tensile Elongation [%]** | **6** | -2 |
| **Change in Hardness [points]** | **0** | -15 |
| **Volume change [%]** | **0.6** | 17.7 |

| 1% acetic acid compatibility 80 ℃ for 72 hours | AFLAS® 150P | FKM |
|---|---|---|
| **Chang of Tensile Strength [%]** | **-11** | -10 |
| **Change of Tensile Elongation [%]** | **-22** | -14 |
| **Change in Hardness [points]** | **2** | -10 |
| **Volume change [%]** | **1.0** | 33.8 |

| 1% acetic acid compatibility 80 ℃ for 168 hours | AFLAS® 150P | FKM |
|---|---|---|
| **Chang of Tensile Strength [%]** | **-10** | -22 |
| **Change of Tensile Elongation [%]** | **-15** | -32 |
| **Change in Hardness [points]** | **0** | -18 |
| **Volume change [%]** | **1.40** | 50.0 |