

API 6A
DECLARATION OF CONFORMITY
GUARNIFLON MATERIALS

A leading independent Test House has assessed the following Guarniflon materials:

- **PTFE G400** (Virgin PTFE)
- **PTFE G418** (PTFE + 15% Glass fibre + 5% MoS₂)
- **PTFE G453** (PTFE + 25% Carbographite)
- **PTFE G500** (Modified PTFE)

according the Sour immersion testing of Thermoplastic materials to API 6A (ISO 10423:2009 – “Petroleum and natural gas industries – Drilling and production equipment – Wallhead and Christmas tree equipment”) – Appendix F.1.13.5.2” under the following test conditions :

Temperature	200°C
Pressure	1000 psig
Gas phase	FF/HH : 10/80/10 vol. % H ₂ S/CO ₂ /CH ₄ (35% volume)
Liquid phase	5% volume of water (deionised water, conductivity < 5µS + 60% volume of Hydrocarbon - NORSOK oil (70%/20%/10% heptane/cyclohexane/toluene)
Tensile replicates	5
Test time	160 hours, minimum

All specimens of the four different grades of PTFE thermoplastic materials were intact after the sour fluid exposure, with no visible evidence of chemical ageing.

All changes of mass, volume and hardness are small (mass and volume <3%, Hardness 2 units). Changes in Tensile Strength and Elongation are small.

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Notes

Note No. 1- It still remains the customer’s own responsibility to determine the suitability of plastic components made of our materials for the application or application conditions.

Note No. 2 : The customer must always specify in the Orders when an approval / certification stated in this document is necessary This because the approved materials follow a different internal procedure with respect to the standard materials.

