



TEST CERTIFICATE: APT-TC-221207-01

Standard: API 6A 21st Edition Annex F.1.13.5.2
Material: Compound 678
Status: Qualified

Issued To: Greene Tweed
2075 Detwiler Road, Kulpville, PA, 19443-0305
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Qualification Statement:

Compound 678 is qualified to API 6A 21st Edition according to Annex F.1.13.5.2 immersion testing for material class FF/HH 10% H₂S design validation procedures meeting Norsok M-710 Ed. 3 and ISO 23936-2:2011 sour aging acceptance criteria.

Qualification Parameters	
35% Gas	10% H ₂ S / 80% CO ₂ / 10% CH ₄
60% Hydrocarbon	Kerosene (Diesel #1)
5% Water	Distilled Water
Exposure	To the liquid hydrocarbon phase
Pressure	1000 ± 100 psi
Duration	160 hours
Temperature	350.6°F (177°C)

Acceptance Criteria		
Property	Criteria	Result
Hardness	+10 / -20 points	Met
Volume	+25% / -5%	Met
Tensile Strength	± 50%	Met
Elongation at Break	± 50%	Met
100% Modulus	± 50%	Met

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