

TEST CERTIFICATE: APT-TC-230322-01

Standard: API 6A 21st Edition Annex F.1.13.5.2

Material: Avalon 87
Status: Qualified

Issued To: Greene Tweed & Co.

2075 Detwiler Road, Kulpsville, PA 19443

May 26, 2023

Qualification Statement:

The Avalon 87 compound 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 ISO 23936-1:2022 level 2 aging acceptance criteria.

Qualification Parameters		
35% Gas	10% H2S / 80% CO2 / 10% CH4	
60% Hydrocarbon	Kerosene (Diesel #1)	
5% Water	Distilled Water	
Exposure	Hydrocarbon Liquid Phase	
Pressure	1000 ± 100 psi	
Duration	160 hours	
Temperature	392°F (200°C)	

Acceptance Criteria			
Property	Criteria	Result	
Volume	+10% /-1%	Pass	
Tensile Strength	± 50%	Pass	
Elongation at Break	± 50%	Pass	
Modulus	± 50%	Pass	

Prepared By: Kevin Ballard

Approved By:

Nick Plasket Staff Scientist

Kevin Ballard Principal Scientist



Alpine Polytech

1325 Ranchers Legacy Trail, Fort Worth, TX 76126 Accredited to: ISO/IEC 17025:2017, Field of Accreditation: Mechanical Testing