SSGG LP/EMB/30/2081524.

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Spec No.	T-MAINT-LP-EBMRC-01-25		
Date	16/06/25	Rev	00

SUI SOUTHREN GAS COMPANY LIMITED

TECHNICAL SPECIFICATIONS
EPOXY BASED METAL REPAIR COMPOSITE

Spec No.	T-MAINT-LP-EBMRC-01-25		
Date	16/06/25	Rev	00

Thermal Properties: Glass Transition Temperature (ISO 11357-2) 156°F at cure temperature 72°F 216°F at cure temperature 212° Dry Heat Resistance (ISO 11357) 392°F Chemical Properties (ASTM D4327 & ASTM E1479)					
Mix Ratio by Weight (Base : Solidifier):	Mixing &	& Application Properties			
Nil at 1.0 inch (25.4 mm) Nil at 1.0 inch (25.4 mm)		Two-part epoxy-based metal repair composite			
Nil at 1.0 inch (25.4 mm) Environmental Properties:	Mix Ratio by Weight (Base : Solidifier):	5:1			
Environmental Properties: VOC content (ASTM D2369/EPA ref. 24) 0.09% / 2.38 g/L					
Mechanical Properties: Compressive Strength (ASTM D695) 12800 psi (88.2 MPa) at 22°C (77°F) 17950 psi (123.8 MPa) at 100°C (212°F) 3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (3.1.7 MPa) at cure temperature of 22°C (77°F) 4.1 x 10 ⁵ psi (3.1.7 MPa) at cure temperature of 100°C (212°F) 4.1 x 10 ⁵ psi (9.5 GPa) at cure temperature of 100°C (212°F) 4.1 x 10 ⁵ psi (9.5 GPa) at cure temperature of 100°C (212°F) 4.1 x 10 ⁵ psi (9.4 GPa) at cure temperature of 100°C (212°F) 4.1 x 10°F psi (9.4 GPa) at cure temperature of 100°C (212°F) 4.1 x 10°F psi (Slump Resistance	Nil at 1.0 inch (25.4 mm)			
Mechanical Properties: Compressive Strength (ASTM D695) 12800 psi (88.2 MPa) at 22°C (77°F) 17950 psi (123.8 MPa) at 100°C (212°F) 17950 psi (123.8 MPa) at 100°C (212°F) 3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.596.9 psi (31.7 MPa) at cure temperature of 22°C (77°F) 6351.4 psi (43.8 MPa) at cure temperature of 100°C (212°F) 1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 22°C (77°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 22°C (77°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 20°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa	Environmental Properties:				
12800 psi (88.2 MPa) at 22°C (77°F) 17950 psi (123.8 MPa) at 100°C (212°F) 3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (31.7 MPa) at cure temperature of 22°C (77°F) 6351.4 psi (43.8 MPa) at cure temperature of 100°C (212°F) 4.3 * 10 ⁶ psi (9.5 GPa) at cure temperature of 22°C (77°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 4.1 x 10 ⁵ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 4.1 x 10° psi (9					
17950 psi (123.8 MPa) at 100°C (212°F) 3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) 4.1 x 10 ⁵ psi (2.8 GPa) at cure temperature of 22°C (77°F) 6351.4 psi (43.8 MPa) at cure temperature of 100°C (212°F) Young's Modulus (ASTM D638)	Mechanical Properties:				
3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F) 4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) Tensile Strength at break (ASTM D638) 4596.9 psi (31.7 MPa) at cure temperature of 22°C (77°F) 6351.4 psi (43.8 MPa) at cure temperature of 100°C (212°F) Young's Modulus (ASTM D638) 1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 22°C (77°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) & 100°C (212°F) cure Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure Thermal Properties: Glass Transition Temperature (ISO 11357-2) Dry Heat Resistance (ISO 11357) 392°F Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Stephur Content Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,	Compressive Strength (ASTM D695)	12800 psi (88.2 MPa) at 22°C (77°F)			
4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F) Tensile Strength at break (ASTM D638)	•	17950 psi (123.8 MPa) at 100°C (212°F)			
Tensile Strength at break (ASTM D638) 4596.9 psi (31.7 MPa) at cure temperature of 22°C (77°F) 6351.4 psi (43.8 MPa) at cure temperature of 100°C (212°F) Young's Modulus (ASTM D638) 1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) Hardness (Shore D) (ASTM D2240) 81 at 22°C (77°F) & 100°C (212°F) cure Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure Thermal Properties: Glass Transition Temperature (ISO 11357-2) 156°F at cure temperature 72°F 216°F at cure temperature 212° Dry Heat Resistance (ISO 11357) 392°F Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Stephur Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,	pressive Modulus (ASTM D695)	3.3 x 10 ⁵ psi (2.3 GPa) at 22°C (77°F)			
Young's Modulus (ASTM D638) 1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 1.36 * 10 ⁶ psi (9.4 GPa) at cure temperature of 100°C (212°F) 81 at 22°C (77°F) & 100°C (212°F) cure Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure Thermal Properties: Glass Transition Temperature (ISO 11357-2) 156°F at cure temperature 72°F 216°F at cure temperature 212° Dry Heat Resistance (ISO 11357) 392°F Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,		4.1 x 10 ⁵ psi (2.8 GPa) at 100°C (212°F)			
1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 22°C (77°F)	Tensile Strength at break (ASTM D638)				
Hardness (Shore D) (ASTM D2240) Hardness (Shore D) (ASTM D2240) Hardness (Barcol 935) (ASTM D2583)					
Hardness (Shore D) (ASTM D2240) 81 at 22°C (77°F) & 100°C (212°F) cure Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure Thermal Properties: Glass Transition Temperature (ISO 11357-2) Dry Heat Resistance (ISO 11357) Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Shiphur Content 430 Reavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,	Young's Modulus (ASTM D638)	1.38 * 10 ⁶ psi (9.5 GPa) at cure temperature of 22°C (77°F)			
Hardness (Shore D) (ASTM D2240) 81 at 22°C (77°F) & 100°C (212°F) cure Hardness (Barcol 935) (ASTM D2583) 84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure Thermal Properties: Glass Transition Temperature (ISO 11357-2) Dry Heat Resistance (ISO 11357) Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Shiphur Content 430 Reavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,		$1.36 * 10^6$ psi (9.4 GPa) at cure temperature of 100°C (212°F)			
Thermal Properties: Glass Transition Temperature (ISO 11357-2) 156°F at cure temperature 72°F 216°F at cure temperature 212° Dry Heat Resistance (ISO 11357) 392°F Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Staphur Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, < 3,	Hardness (Shore D) (ASTM D2240)	81 at 22°C (77°F) & 100°C (212°F) cure			
Glass Transition Temperature (ISO 11357-2) Dry Heat Resistance (ISO 11357) Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Stephur Content Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, 156°F at cure temperature 72°F 216°F at cure temperature 212° 392°F Chemical Properties (ASTM D4327 & ASTM E1479) 430 854	Hardness (Barcol 935) (ASTM D2583)	84 at 22°C (77°F) Ambient Cure 85 at 100°C (212°F) Post Cure			
Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Stephur Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, < 3,		ermal Properties:			
Chemical Properties (ASTM D4327 & ASTM E1479) Chloride Content 430 Stephur Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, <3,	Glass Transition Temperature (ISO 11357-2)	156°F at cure temperature 72°F 216°F at cure temperature 212°F			
Chloride Content 430 Staphur Content 854 Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, <3,	Dry Heat Resistance (ISO 11357)	392°F			
Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,	Chemical Propertie	es (ASTM D4327 & ASTM E1479)			
Heavy metals (Antimony, Arsenic, Bismuth, Cadmium, Lead, Tin, Silver, Mercury,	Chloride Content	430			
Cadmium, Lead, Tin, Silver, Mercury,	strohur Content	854			
Cadmium, Lead, Tin, Silver, Mercury, Gallium, Indium)	Heavy metals (Antimony, Arsenic, Bismuth,				
	Cadmium, Lead, Tin, Silver, Mercury, Gallium, Indium)	< 3,			
Shelf Life 5 years at storage temperatures	Shelf Life	5 years at storage temperatures			
Applications:					

- Repair of cracks and holes on engine and pump casings, pipes, tanks and other equipment
- Resurface of pitted metal surfaces
- Repair of damaged shafts and hydraulic rams
- In-situ flange repair
- High strength structural adhesive for metal bonding
- Creation of irregular load bearing shims and reforming of bearing housings

Senior Engineer (M)
Transmission (KT)
Sui Southern Gas Co. Ltd.

SOHAL AHMED

Some (G&W) KT

Manager (G&W) KT

Southern Cos Co 1:3.