

Non-crystalline Low-viscosity Polyolefin Based Visco-Elastic Tape (ISO21809-3)			
Technical Data Sheet			
Product Name	Viscoelastic Tape, viscoelastic Tape、Visco elastic Body Adhesive Tape、Non-crystalline Low-viscosity Polyolefin Based		
System Description	Visco-Elastic Tape is a wraparound corrosion protective coating consisting of a modified and reinforced visco-elastic adhesive applied onto a polyethylene carrier film. Visco-elastic can be used for the coating of pipes, coating of risers, coating of flanges, coating of manholes, coating of valves, coating of offshore risers and pillars, underwater coating of risers, coating of welded sockets, repair of all type of coatings, sealing of pipe and cable conduits, sealing of tank chimes, sealing of pipe casings.		
Product Features	Saves time, surface preparation no need blasting and preheating, without applying epoxy primer Super bonding to Steel, and any coating material include PE, PP, FBE and AE Superior cathodic disbondment offers the optimum barrier long term protection against corrosion. Self-healing ability when slightly damaged due to plastic-elastic properties No flowing and dripping on maximum operation temperature Impermeable to water and oxygen Long shelf-life		
Executive Standard	ISO21809-3:2016 Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 3: Field joint coatings		
Warranty Period	24 Months		
Selection Range	thickness: 1.8mm, 2.0mm Length: 50mm, 75mm, 100mm, 150mm, 200mm, 225mm, 300mm Duration: 10M, 15M, 20M		
Package Specification	Cartons+Pallets		
Technical Index Property	Test Standard	Outer Wrap Tape (FJC 13A)	Heat Shrinkable Outer Wrap (FJC 13B)
Visco Elastic Body Adhesive Tape			
Max Operating Temperature	--	≤50℃ (FJC 13A-1) ≤70℃ (FJC 13A-2) ≤95℃ (FJC 13A-3) ≤120℃ (FJC	≤50℃ (FJC 13B-1) ≤70℃ (FJC 13B-2) ≤95℃ (FJC 13B-3) ≤120℃ (FJC

		13A-4)	13B-4)
Environment Temperature Range	--	-60°C~50°C (FJC 13A-1) -60°C~70°C (FJC 13A-2) -60°C~95°C (FJC 13A-3) -60°C~120°C (FJC 13A-4)	-60°C~50°C (FJC 13B-1) -60°C~70°C (FJC 13B-2) -60°C~95°C (FJC 13B-3) -60°C~120°C (FJC 13B-4)
Minimum thickness, at 23°C, mm	ISO21809-3 Annex B	1.85 or other	1.85 or other
Glass transition temperature, °C	ISO11357-2	<-60	<-60
Crystallization temperature, °C	ISO11357-3	<-100	<-100
Holiday detection at 5 kV/ mm + 5 kV, max. 25 kV	ISO21809-3 Annex C	No holiday	No holiday
Drip resistance, at Tmax+20°C (minimum 80 °C)	ISO21809-3 Annex K	No dripping of compound	No dripping of compound
Adhesion test of reinforced compound with respect to steel and to plant coating before and after thermal ageing and before and after hot-water immersion, both for 100 days to steel, at 23°C, Coverage, N/mm, % to steel, at Tmax+20°C, Coverage, N/mm, % to plant coating, at 23°C, Coverage, N/mm, % to plant coating, at Tmax+20°C, Coverage, N/mm, %	ISO21809-3 Annex H ISO21809-3 Annex I	Cohesive separation mode 0.08, >95 0.03, >95 0.07, >95 0.03, >95	Cohesive separation mode 0.08, >95 0.03, >95 0.07, >95 0.03, >95
Adhesion test of compound without reinforcement with respect to steel and to plant coating before and after thermal ageing and before and after hot-water immersion, both for 100 days to steel, at 23°C to steel, at Tmax+20°C to plant coating, at 23°C	ISO21809-3 Annex I	Leaved Leaved Leaved Leaved	Leaved Leaved Leaved Leaved

to plant coating, at Tmax+20°C			
Lap shear resistance, Cohesive separation mode Coverage at 23°C, N/mm ² at Tmax+20°C, N/mm ²	ISO21809-3 Annex I	0.006, >95 0.003, >95	0.006, >95 0.003, >95
Specific electrical insulation resistance R _{S100} , at 23°C, Ω· m ² R _{S100} /R _{S70} , at 23°C	ISO21809-3 Annex E	2.1*10 ⁸ 0.87	2.1*10 ⁸ 0.87
Complete Coating			
Impact resistance, at 23°C, J	ISO21809-3 Annex D	16	16
Indentation resistance, Test pressure, 1,0N/mm ² at 23°C, mm at Tmax+20°C, mm	ISO21809-3 Annex E	1.2 0.7	13.5 0.7
Cathodic disbondment resistance, at 28 days at 23°C, mm at Tmax+20°C, mm		0, no holiday 0, no holiday	0, no holiday 0, no holiday
Outer Material	ISO21809-3 Annex G ISO21809-3 Annex C	Outer wrap — Polymeric tape	Outer wrap — Heat-shrinkable material
Peel strength of outer wrap layer to outer wrap layer at 23°C, N/mm at Tmax+20°C, N/mm	ISO21809-3 Annex L	0.25 0.03	1.2 0.3
Peel strength to plant coating, Elastic modulus after thermal ageing at 23°C, N/mm at Tmax+20°C, N/mm	ISO21809-3 Annex H	1.26 0.13	1.2 0.3
Peel strength (P' ₁₀₀ /P' ₀) outer layer to outer layer after hot water immersion for 100 days at Tmax, max. 95 °C./at 23°C	ISO21809-3 Annex L ISO21809-3 Annex I	0.88	0.88
Peel strength (P ₁₀₀ /P ₀) to plant coating after hot water immersion for 100 days at Tmax, max. 95 °C./at 23°C	ISO21809-3 Annex H ISO21809-3 Annex I	0.87	0.87

<p>Elastic modulus (E_{100}/E_0) after thermal ageing for 100 days at $T_{max}+20^{\circ}\text{C}/\text{at } 23^{\circ}\text{C}$</p>	<p>ISO527-2</p>	<p>0.87</p>	<p>0.87</p>
<p>Peel strength (P'_{100}/P'_0) outer wrap layer to outer wrap layer after thermal ageing for 100 days at $T_{max}+20^{\circ}\text{C}/\text{at } 23^{\circ}\text{C}$</p>	<p>ISO21809-3 M</p>	<p>0.57</p>	<p>0.57</p>
<p>Peel strength to plant coating after thermal ageing (P_{100}/P_0) for 100 days at $T_{max}+20^{\circ}\text{C}/\text{at } 23^{\circ}\text{C}$</p>	<p>ISO21809-3 M</p>	<p>0.82</p>	<p>0.82</p>
<p>Installation Instructions</p>	<ol style="list-style-type: none"> 1. Surface treatment The surface rust of pipe body is removed by mechanical rust removal equipment (electric angle mill), and the derusting grade reaches ST2. After rust removal, the surface of the pipe body is dried by a heat blower. 2. Pipe body wrapped with viscoelastic anti-corrosion tape Wrap a layer of viscoelastic anti-corrosion tape around the pipe section which has finished surface treatment, and the lap length between the end and the original coating shall not be less than 50mm. The minimum lap length of the joint of anti-corrosion tape is 10 mm. When wrapping the viscoelastic anti-corrosion tape, it is unnecessary to maintain a large tension, and press the edge and overlapping part of the tape by hand. 3. Flange and other special-shaped parts wrapped with viscoelastic anti-corrosion tape For the anti-corrosion operation at the connection of valve flange, the connecting bolt can be filled with anti-corrosion paste and coated with viscoelastic anti-corrosion tape. 4. Wrapping outer protective tape The basic operation method is the same as that of viscoelastic anti-corrosion tape, but the tension shall be maintained when wrapping the outer protective tape. The overlapping amount of joint part is 50%. The two ends of the anticorrosive pipe section shall be exposed 1-2mm respectively, and the outer protective tape shall not be wrapped. 5. Quality inspection The quality requirements for installation of viscoelastic anti-corrosion tape and outer protective tape: the surface is flat, overlapping is even, and there is no bubble, wrinkle and damage. 		



Installation Picture



Apply Pictures

Manufacturer:

China Sichuan Forever Radiation Technology Co.,Ltd, The main products are 3LPE Heat Shrinkable Sleeve, HDD Pipeline Shrinkable Sleeve, 2LPE Heat Shrinkable Tape, 3LPE Heat Shrinkable Tubular Sleeves, Polyethylene Pressure-sensitive Adhesive Shrinkable Sleeve, 3LPE & 3LPP Heat Shrinkable Wrapping Tape, Heat Shrinkable Water-proof End Cap, 3LPP Heat Shrinkable Sleeve, Epoxy Primer, Non-crystalline Low-viscosity Polyolefin Based Visco-Elastic Tape, Repair Patch, PE Melt Stick, Heat Shrinkable 3LPE Tape For Pre-insulated Pipe, OEM Heat Shrinkable Material Service, Auto-Matic and Manual Type Installation Tools, Irradiation Service, Third Party Inspection Service.

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