



PIPE INSULATION

- **TAPES**
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- **PIPRIME**
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Pipe Insulation Products Range





Technical Data Sheet

AWAZEL PIPE SHIELD NR-16-750

Durable and Heavy Duty PVC/Bitumen Pipeline Tape, Non-reinforced

DESCRIPTION

PIPE SHIELD NR 16-750 is 1.65mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound, laminated to a tough and heavy duty PVC Backing

USES

For the anti-corrosion protection of buried or immersed pipes and fittings. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Excellent puncture resistance.
- Excellent tensile strength properties.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good Conformability.
- Excellent adhesion to pipe and self.
- Excellent resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. will require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



PI011604

AWAZEL PIPE SHIELD NR-16-750

Durable and Heavy Duty PVC/Bitumen Pipeline Tape, Non-reinforced

Technical Specification

PROPERTIES		Typical Results	Test Methods
Thickness, mm:	Backing	0.75	ASTM D 1000
	Adhesive	0.90	
	Total	1.65	
Weight, kg/m ²		1.9	UEAtc M.O.A.T. 31
Tensile strength, N/mm		18	ASTM D 638
Tear Strength, N strength, N/mm		>50	ASTM D 1004
Elongation at Break, %		270	BS 2782 DIN 52123
Adhesion Peel Strength, N/mm:	To primed steel	5.0	ASTM D 1000
	To self	5.5	
Impact Strength, Nm		15	ASTM G 14
Dielectric Strength, kV		>40	BS 2782
Water Absorption, %		<0.2	ASTM D 570 ASTM D 5147
Water Vapor Transmission, g/m ² /24 hr.		<0.4	ASTM E 96
Operating Temperature, °C		-20 to +80	-----
Insulation Resistance		10 ⁵ Megaohms/cm ²	
Recommended Holiday Test Voltage:	Single Layer, kV	10	-----
	Double Layers, kV	15	
Roll Widths, mm		50, 100, 150 & 225 (other widths are available upon request)	-----
Roll Length, m		10 / 20 or to order	-----

The Information given above is intended as a general guide only. We believe the information is accurate and reliable. Users must determine the suitability of the product for their own particular use.



Technical Data Sheet

AWAZEL PIPE GUARD 16-500

Durable PVC/Bitumen Pipeline Tape

DESCRIPTION

PIPE GUARD 16-500 is 1.65mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound, laminated to a thick and tough plasticized PVC Backing.

USES

For the anti-corrosion protection of buried or immersed pipes and fittings. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Tough and very good puncture resistance
- Very high tensile strength properties.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good conformability.
- Excellent adhesion to pipe and self.
- Excellent resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. will require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



AWAZEL PIPE GUARD 16-500

Bituminous Pipe Wrapping Tape laminated to PVC Sheet

Technical Specification

PROPERTIES		Typical Results	Test Methods
Thickness, mm:	Backing	0.50	ASTM D 1000
	Adhesive	1.15	
	Total	1.65	
Weight, kg/m ²		1.8	UEAtc M.O.A.T. 31
Breaking strength, N/mm		10	ASTM D 1000
Tear Strength, N		>35	ASTM D 1004
Elongation at Break, %		260	BS 2782 DIN 52123
Adhesion Peel Strength, N/mm:	To primed steel	5.0	ASTM D 1000
	To self	5.5	
Impact Strength, Nm		12	ASTM G 14
Dielectric Strength, kV		>35	BS 2782
Maximum Service Temperature, °C		60	-----
Recommended Holiday Test Voltage:	Single Layer, kV	10	-----
	Double Layers, kV	15	
Roll Widths, mm		50, 100, 150 & 225 (other widths are available upon request)	-----
Roll Length, m		10 / 20	-----

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Technical Data Sheet

AWAZEL PIPE GUARD 16-300

Durable PVC/Bitumen Pipeline Tape

DESCRIPTION

PIPE GUARD 16-300 is 1.65mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound, laminated to a thick and tough plasticized PVC Backing.

USES

For the anti-corrosion protection of buried or immersed pipes and fittings. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Very good puncture resistance
- Very good tensile strength properties.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good conformability.
- Excellent adhesion to pipe and self.
- Excellent resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPE PRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. will require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



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AWAZEL PIPE GUARD 16-300

Bituminous Pipe Wrapping Tape laminated to PVC Sheet

Technical Specification

PROPERTIES	Typical Results	Test Methods
Thickness, mm: Backing	0.30	ASTM D 1000
Adhesive	1.35	
Total	1.65	
Weight, kg/m ²	1.8	UEAtc M.O.A.T. 31
Breaking strength, N/mm	8.0	ASTM D 1000
Tear Strength, N	20	ASTM D 1004
Elongation at Break, %	260	BS 2782 DIN 52123
Adhesion Peel Strength, N/mm: To primed steel To self	5.0 5.5	ASTM D 1000
Impact Strength, Nm	10	ASTM G 14
Dielectric Strength, kV	<30	BS 2782
Maximum Service Temperature, °C	60	-----
Recommended Holiday Test Voltage: Single Layer, kV Double Layers, kV	10 15	-----
Roll Widths, mm	225 & 150, 100, 50 (other widths are available upon request)	-----
Roll Length, m	20/10	-----

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Technical Data Sheet

AWAZEL PIPE GUARD 16-100

CLPE Film/Bitumen Pipeline Tape

DESCRIPTION

PIPE GUARD 16-100 is 1.65mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound, laminated to a specially manufactured cross laminated polyethylene film Backing.

USES

For the anti-corrosion protection of buried or immersed pipes and fittings. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Very good tensile strength properties in both directions.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good conformability.
- Good impact resistance.
- Excellent adhesion to pipe and self.
- Very Good resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. will require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



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AWAZEL PIPE GUARD 16-100

Bituminous Pipe Wrapping Tape laminated to CLPE Film

Technical Specification

PROPERTIES	Typical Results	Test Methods
Thickness, mm: Backing	0.10	M.O.A.T. 31 ASTM D 1000
Adhesive	1.55	
Total	1.65	
Weight, kg/m ²	1.8	M.O.A.T. 31
Coating Asphalt: Type Softening Point °C Penetration at 25 °C, dmm	SBS Modified >120 55-75	ASTM D 36 ASTM D 5
Tensile Strength, Film, N/mm ² : Longitudinal Transversal	45 50	ASTM D 638
Tensile Strength, Tape: Longitudinal Transversal	230 310	DIN 52123
Tear Strength, N	20	ASTM D 1004
Elongation, Tape, %: Longitudinal Transversal	310 220	DIN 52123
Puncture Resistance, N-mm	145 - 65	ASTM E 154
Adhesion Peel Strength, N/mm: To primed steel To self	6.5 6.0	ASTM D 1000
Dielectric Strength, kV	25	
Heat Resistance, °C	120	UEAtc M.O.A.T. 31
Maximum Service Temperature, °C	60	-----
Recommended Holiday test Voltage: Single Layer, kV Double Layers, kV	10 15	-----
Roll Length, m	50, 100, 150 & 225 (other widths are available upon request)	-----
Roll Length, m	10/20	-----

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Technical Data Sheet

AWAZEL PIPE SEAL 16-125

HDPE Film/Bitumen Pipeline tape

DESCRIPTION

PIPE SEAL16-125 is 1.65mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound, laminated to a tough and durable HDPE Film Backing.

USES

For the anti-corrosion protection of buried or immersed pipes and fittings. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Tough and good impact resistance
- Good tensile strength properties.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good conformability.
- Excellent adhesion to pipe and self.
- Very Good resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. may require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



AWAZEL PIPE SEAL 16-125

Bituminous Pipe Wrapping Tape laminated to HDPE Film

Technical Specification

PROPERTIES	Typical Results	Test Methods
Thickness, mm: Backing	0.125	UEAtc M.O.A.T. 31 ASTM D 1000
Adhesive	1.525	
Total	1.65	
Weight, kg/m ²	1.8	M.O.A.T. 31
Coating Asphalt: Type	SBS Modified	ASTM D 36 ASTM D 5
Softening Point °C	>120	
Penetration at 25 °C , dmm	55-75	
Tensile Strength, Film, N/cm: Longitudinal	35	DIN 52123 BS 2782
Transversal	30	
Tear Strength, N	20	ASTM D 1004
Elongation, Tape, %: Longitudinal	250	DIN 52123
Transversal	220	
Impact Resistance, Nmm	2	ASTM E G 14 DIN 30672
Adhesion Peel Strength, N/mm:	5.0	ASTM D 1000
To primed steel		
To self	5.5	
Dielectric Strength, kV	12	BS 2782
Heat Resistance, °C	120	UEAtc M.O.A.T. 31
Maximum Service Temperature, °C	60	-----
Recommended Holiday Test Voltage:		-----
Single Layer, kV	10	
Double Layers, kV	15	
Roll Length, m	50, 100, 150 & 225 (other widths are available upon request)	-----
Roll Length, m	10/20	-----

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Technical Data Sheet

AWAZEL FLASH GUARD 16-45

Aluminum Foil surfaced Bituminous Pipe Line Tape

DESCRIPTION

FLASH GUARD 16-45 is 1.65 mm thick cold applied self adhesive tape with specially formulated rubberized bituminous compound surfaced with UV Resistant silver coloured aluminum foil.

USES

For the ultra-violet applications of pipes and fittings and also ideal for A/C Duct insulation. The tapes can be applied by hand or machine to weld joints, bends, bare pipe lengths and pipe fittings.

FEATURES

- Ideal for exposed UV resistant applications.
- Good tensile strength and elongation properties.
- Applied to marginally prepared surfaces.
- Cold applied.
- Good conformability.
- Good impact resistance.
- Excellent resistance to cathodic disbonding.
- Compatible with common pipe coatings.

APPLICATION

Prepare surfaces by removing all loose scale, rust or other foreign matter by wire brush or grit blasting. Surface must be clean, dry and free of grease. Apply thin film of **AWAZEL PIPRIME** to all surfaces to be wrapped and allow to dry. Peel back interleaving about 20 cm or as req. and apply adhesive side of the tape to the primed surface and press down. Apply the tape spirally with enough tension to make it conform. Remove interleaving as wrapping proceeds. Overlap each turn by at least 1 Inch (or 55% to achieve double thickness) or as per project specs. Irregular surfaces such as valves, flanges, etc. may require the use of a special moulding putty like **AWAZEL PIPE MASTIC-C** (refer to our Data Sheet for its technical details).



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AWAZEL FLASH GUARD 16-45

Aluminum Foil surfaced Bituminous Pipe Line Tape

Technical Specification

PROPERTIES	Typical Results	Test Methods
Thickness, mm: Backing	0.045	UEAtc M.O.A.T. 31 ASTM D 1000
Adhesive	1.605	
Total	1.65	
Weight, kg/m ²	1.8	M.O.A.T. 31
Breaking Strength, Film, N/mm	5.0	ASTM D 1000
Tear Strength, N	20	ASTM D 1004
Elongation at Break, %	>25	BS 2782 DIN 52123
Puncture Resistance, N-mm	145 - 65	ASTM E 154
Adhesion Peel Strength, N/mm:	6.0	ASTM D 1000
To primed steel	5.5	
To self		
Dielectric Strength, kV	25	BS 2782
Impact Strength, Nm	5	ASTM G 14
Maximum Service Temperature, °C	60	-----
Recommended Holiday Test Voltage:		-----
Single Layer, kV	10	
Double Layers, kV	15	
Roll Widths, mm	50, 100, 150 & 225 (other widths are available upon request)	-----
Roll Length, m	10/20	-----

The Information given above is intended as a general guide only. We believe the information is accurate and reliable. Users must determine the suitability of the product for their own particular use.



Technical Data Sheet

PIPE COATINGS

FD PIPE COAT & STD PIPE COAT

INTRODUCTION

AWAZEL PIPE COATINGS are cold applied bitumen compounds formulated to provide protection for concrete and steel pipes against the corrosive effects of aggressive salts.

ADVANTAGES

- Provides protection against corrosive effects for all types metal pipes
- Very effective on irrigation pipes
- Two types available; fast drying and slow drying

USES

PIPE COATINGS are used for the protection of pipes against aggressive salts.

INSTRUCTIONS FOR APPLICATION

Surface Preparation: The surfaces should be cleaned thoroughly and should be dried before applying AWAZEL PIPE COATING.

Application: The material should be thoroughly mixed before application. It can be applied with brush or spray equipment. The consistency may increase when the material is in use due to the evaporation of the solvent. The original consistency can be re-established by the addition of AWAZEL SOLVENT or any other solvent as recommended by AWAZEL.

CLEANING

PIPE COATINGS can be removed from equipment and tools with any suitable solvent such as gasoline or kerosene.

COVERAGE

0.5 - 1.0 kg/m² of the surface area

HEALTH & SAFETY

Workers should wear protective masks, gloves and goggles during application.

PRECAUTIONS

PIPE COATINGS contain volatile solvent and have a low flash point. Care must be taken to ensure that there is adequate ventilation in the working place. Fires and naked flames should be kept at a distance.

PACKING

PIPE COATINGS are supplied in 180 kg drums and 18 kg cans. Other weights are available upon request.

STORAGE

PIPE COATINGS should be stored in a dry and shaded area in original packing. The container should be kept tightly closed in order to prevent the evaporation of the solvent and consequent thickening of the material.

AWAZEL PIPE COATINGS

TECHNICAL DATA

Properties	STD. PIPE COAT		F.D. PIPE COAT		Test Method
	minimum	maximum	minimum	maximum	
Saybolt Furol Viscosity at 25°C, seconds	30	100	30	100	ASTM D 88
Drying time to touch, hours	3		2		MRDD-13(97)
Drying time to tough, hours	24		24		MRDD-13(97)
Distillation, volume % of specimen					ASTM D 402
Upto 225°C	–	–	35	–	
Upto 360°C	–	–	–	65	
Test on residue from distillation:					ASTM D 5 ASTM D 2042
Penetration at 25°C, dmm	20	50	5	35	
Solubility in trichloroethylene %	99	–	99	–	
Water. volume. %	Nil		Nil		ASTM D 95



Technical Data Sheet



AWAZEL PIPRIME

Special Bituminous Primer for the application on pipes

INTRODUCTION

AWAZEL **PIPRIME** is an asphaltic primer produced with selected petroleum asphalt and past drying solvents. It is ideal to use for the surface dressing of pipes, prior to the application of AWAZEL PIPE WRAPPING TAPES.

SPECIAL FEATURES

- Fast drying bituminous primer
- Improves the bond of bituminous pipe wrapping tapes
- Suitable for all types of pipes
- Conforms to the requirements of ASTM D 41

USES

AWAZEL **PIPRIME** is ideally suitable for the application on pipes prior to the wrapping of bituminous pipe wrapping tapes. It can also be used as a primer coat to receive membranes or liquid asphalts and asphalt products.

INSTRUCTIONS FOR APPLICATION

Surface Preparation: The surfaces must be clean and free of oil, grease or other foreign matters.

Application: After stirring well, AWAZEL **PI PRIME** can be applied by brush, roller or spray equipment. It should be allowed to dry naturally. When localized discoloured patches are noticed, they can re-coated to achieve a uniform black finish, if required.

CLEANING

The primer can be removed from equipment and tools with any suitable solvent such as gasoline or kerosene.

COVERAGE

Approximate rate : 0.2 - 0.3 kg/m² The exact rate will depend upon the porosity or smoothness of the surface.

HEALTH & SAFETY

Workers should wear protective tools, such as gloves and goggles during application.

PRECAUTIONS

AWAZEL **PIPRIME** contains volatile solvent and has a low flash point. Care must be taken to ensure that there is adequate ventilation in the working place; fires and naked flames shall be kept at a distance.

PACKING

AWAZEL **PIPRIME** is packed in 4 and 18 kg cans. Other weights are available upon request.

STORAGE

Store in a dry shaded area in original packing. The container should be kept covered while working in order to prevent the evaporation of solvent.

AWAZEL PIPRIME

Special Bituminous Primer for the application on pipes

TECHNICAL DATA

Properties	SPECIFICATION	Test Method
Saybolt Furol Viscosity at 25°C, seconds	25 - 125	ASTM D 88
Distillation: Distillate, volume % of the primer: Upto 225°C Upto 316°C	35 (minimum) 65 (maximum)	ASTM D 402
Test on Residue from distillation: Penetration at 25 °C, 0.1 mm Solubility in trichloroethylene, %	2 - 50 99 (min.)	ASTM D 5 ASTM D 2042
Water, volume%	0.5 (maximum)	ASTM D 95
Flash Point (Tag Open Cup), °C	+ 27	ASTM D 3143
Dry Film Thickness	100 - 120 microns (if applied at a rate of 0.25 kg/m ²)	Drying Time Recorder & Micrometer
Drying Time, Hours	2 - 3 (Drying time dependable to ambient temperature, type and porosity of pipe)	MRDD - 13(97) (Drying Time Recorder)



Technical Data Sheet

AWAZEL PIPE MASTIC-C

Cold Applied Bituminous Mastic for Pipe Dressing

INTRODUCTION

AWAZEL PIPE MASTIC-C is a cold applied, self-supporting, non-setting type Bituminous Mastic, Specially designed for dressing on irregular profiles of pipes, such as valves, flanges, couplings, etc...

SPECIAL FEATURES

- Cold applied, can be used directly from the package, without heating or thinning
- Easy to apply
- When applied it forms a uniform and homogenous contour.
Resists the attack of chemicals & salts

USES

AWAZEL PIPE MASTIC-C is a ideal to use for moulding around irregular profiles of pipes such as flanges, mechanical joints and valves to provide a contour suitable for wrapping AWAZEL PIPE WRAPPING Tapes such as AWAZEL PIPE-GUARD, PIPE SEAL, PIPE SHIELD, FLASH GUARD, etc.

TECHNICAL DATA

PROPERTIES	SPECIFICATION		TEST METHOD
	Minimum	Maximum	
Specific Gravity at 25°C	1.3	1.6	ASTM D70
Specific Content, % (Non-volatile matter)	65	----	ASTM D 4479
Colour	Gray-Black		Visual
Resistance to Salts & Acids	Excellent		Immersion
Adhesion to Pipes	Excellent		Physical Method
Flash Point (COC) °C	>100		ASTM D 92
Packing	20 or 8 kg carton box		----
Recommended Primer	AWAZEL PIPEPRIME		----

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