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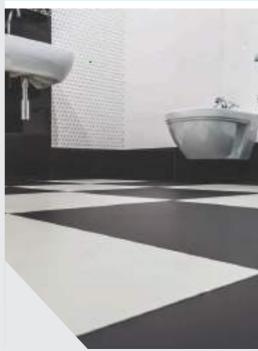
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# Premium range of solutions for construction















Founded by Mr Kasturbhai Lalbhai on September 05, 1947, Atul Ltd (Atul) is one of the largest integrated chemical companies of India. The Company manufactures about 900 products and 400 formulations and owns 140 brands. Atul serves 4,000 customers belonging to over 30 industries in approximately 90 countries and has established subsidiary companies in Brazil, China, Ireland, UAE, UK and USA. The Company offers a wide range of products and applications used in several industries including Agriculture, Adhesives, Animal Feed, Automobile, Composites, Construction, Cosmetic, Defence, Dyestuff, Electrical and Electronics, Footwear, Food, Fragrance and Flavour, Glass, Home Care, Horticulture, Hospitality, Paint and Coatings, Paper, Personal Care, Pharmaceutical, Rubber, Soap and Detergent, Sport and Leisure, Textile, Tyre and Wind Energy.

In India, Atul has its production facilities at Ankleshwar, Atul and Panoli in Gujarat, Ambernath and Tarapur in Maharashtra, and in the UK, at Baltonsborough, Somerset. The first manufacturing site of the Company in Atul, Gujarat is spread over 1,250 acres. Atul's shares are listed on the National Stock Exchange and Bombay Stock Exchange.



# Polymers - Retail

A pioneer in manufacturing epoxy resins and hardeners in India, Atul offers a portfolio of world-class products that are used for diverse applications and in a variety of industries including stone processing, construction chemicals, bangles, handicraft, aerospace, defence, high performance paint and sports goods.

Epoxy and allied products are marketed through the brand, Lapox. To cater to growing demand in the automobile and industrial maintenance market, a range of maintenance products are offered through the brand, Lacare.

In 2010, Atul acquired Polygrip to market synthetic rubber and polyurethane-based adhesives. Polygrip serves a number of industries with a wide range of value-added products that find application in footwear, foam and furnishing, furniture, flooring, HVAC and automobiles.



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Lapox Ultra is a two-component modified, viscous epoxy adhesive system. It creates strong adhesion with similar and dissimilar substrates such as glass, laminate, metal, natural stone, textile and wood.



**ULTIMATE STRENGTH EPOXY ADHESIVE** 

# Benefits

- bonds almost all types of substrates
- high bond strength
- resistant to water and most chemicals
- long working time
- solvent-free and odour-free without any health hazards

# Applications

- fixing marble and granite in kitchens and window frames
- sand broadcasting
- assembly of marble temples
- wood work
  wood to wood bonding
  wood to marble bonding
  wood to glass bonding
- grouting steel railings



# Pack size

Tube packs	6.5 g	13 g	36 g	90 g	180 g
Jar packs	450 g	900 g	1.8 kg	9 kg	

# Coverage\*

75 - 80 sq ft per 1.8 kg set

\*coverage may vary depending upon the surface conditions

# Application process for granite-to-granite bonding



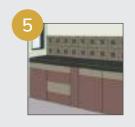
Ensure that the surface is dry, clean and free of oil, grease and other contaminants.



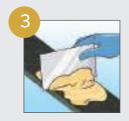
After applying the paste, ensure that the substrate is held in place with a suitable support for a minimum of 8 - 9 hours.



Mix the resin and hardener, in a ratio of 1:0.8 by weight, on a dry and clean flat surface. Thoroughly mix the materials until a homogeneous paste with a uniform colour is achieved.



Leave it for a minimum of 24 hours to achieve optimum strength.



Apply the mixed material using a spatula on the surface to be adhered. It should be used within its pot life time. Ensure even levelling while affixing both the substrates.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Technical details

Properties	Unit	Range
Mixing properties		
Mixing ratio	w/w	100:80
Mixing ratio	V/V	100:100
Mix viscosity at 25 °C	cPs	30,000 - 35,000
Pot life at 25 °C (100 g mixed mass)	minutes	75 - 90
Curing characteristics (for 250 $\mu$ film) - drying time at 25 °C		
Surface dry	hours	2 - 2.5
Touch dry	hours	5 - 5.5
Hard dry	hours	8 - 9
Mechanical properties		
Lap shear strength (Al/Al) at 25 °C 24 hours curing	kg/cm²	min 120
Hardness after 24 hours curing	shore D	min 75

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# LAPOX° RAPID & CLEAR

Lapox Rapid & Clear is a rapid setting, multi-purpose, two-component system for adhesion of similar and dissimilar substrates including glass, metal, plastic, rubber and various other materials in common use.



# RAPID SETTING EPOXY ADHESIVE

# Benefits

- rapid setting
- transparent and waterproof bonding
- does not turn yellow on exposure to light
- higher bonding strength
- easy to use due to rapid curing, hence low labour cost
- chemical resistant

# **Applications**

- marble to marble bonding
- glass to glass bonding
- wood to glass bonding

# Pack size

Tube packs	6 g	12 g	36 g	90 g	180 g
Jar packs	1 kg	2 kg			

# Coverage\*\*

7 - 8 sq ft per 180 g set

\*setting time and product performance are subject to ideal and standard temperature, quantities mixed and application method as directed \*\*coverage may vary depending upon the surface conditions

# Application process for glass-to-glass bonding



Ensure that the surface is dry, clean and free of oil, grease and other contaminants.



Apply the mixed material using a brush or a spatula on the surface to be adhered within its pot life time. Ensure even levelling while affixing both the substrates.



Thoroughly mix the resin and hardener in a ratio of 1:1 by weight, on a dry and clean flat surface until a homogeneous paste with a uniform colour is achieved.



Ensure that the substrate is held in place with suitable support for a minimum of 30 - 60 minutes after application of the paste.

Leave it for a minimum of 24 hours to achieve optimum strength.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# **Technical details**

Properties	Unit	Range
Mixing properties		
Mixing ratio	w/w	100:100
Mixing ratio	V/V	100:100
Mix viscosity at 25 °C	cPs	30,000 - 35,000
Pot life at 25 °C (100 g mixed mass)	minutes	3 - 5
Curing characteristics (for 250 $\mu$ film) - drying time at 25 °C		
Surface dry	minutes	5 - 10
Touch dry	minutes	15 - 20
Hard dry	minutes	50 - 60
Mechanical properties		
Lap shear strength (Al/Al) at 25 °C 24 hours curing	kg/cm²	min 80
Hardness after 24 hours curing	shore D	min 75

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Lapox Ultrafix is a two-component, high performance, fast-setting epoxy adhesive used for multiple applications. It provides excellent bond strength for various substrates including granite, marble, wood, synthetic and ceramic tiles.



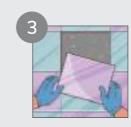


EPOXY ADHESIVE FOR MARBLE CLADDING AND UNDERWATER APPLICATION

# Application process for stone cladding



Ensure that the surface is dry, clean and free of oil, grease and other contaminants. Take desired quantity of the resin and hardener, in a ratio of 1:0.5 by weight, in a clean container.



Ensure even leveling while affixing the stone on the wall.



Thoroughly mix it till a homogeneous paste with uniform colour is achieved. Quickly apply the paste at the four corners as well as the centre of the stone. Consume the paste within 5 - 10 minutes.



After leveling, ensure that the stone is held in place with a suitable support for a minimum of 5 hours.
Leave it for a minimum of 24 hours to achieve optimum strength.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Benefits

- superior bond strength
- excellent adhesion in wet and moist conditions
- high productivity due to rapid curing
- low cost due to spot bonding application
- negligible shrinkage on curing
- resistant to water, electric current and mechanical vibrations
- thixotropic in nature; hence, it does not sag

# **Applications**

- vertical cladding of granite, marble and stone on various substrates such as concrete, plywood, cement fibre boards and metal
- anchoring grout for reinforced steel
- repairing and gap filling of concrete cracks
- sand broadcasting on smooth surfaces such as marble and stone for a better grip
- underwater tile fixing



# Pack size

1.5 kg

# Coverage\*\*

12 sq ft for 1 mm thickness per 1.5 kg set

\*setting time and product performance are subject to ideal and standard temperature, quantities mixed and application method as directed

# **Technical details**

Properties	Unit	Range
Mixing properties		
Mixing ratio	w/w	100:50
Mix viscosity at 25 °C		paste consistency
Pot life at 25 °C (10 g mixed mass)	minutes	10 - 15
Curing characteristics (for 250 µ film) - drying time at 25 °C		
Surface dry	minutes	50 - 60
Touch dry	minutes	80 - 90
Hard dry	minutes	140 - 150
Mechanical properties		
Lap shear strength (AI/AI) at 25 °C, after 24 hours curing	kg/cm²	min 120
Compressive strength after 7 days curing	kg/cm²	400 - 420
Water absorption after 24 hours	%	max 0.5
Pull-out load (substrate, concrete failure)	kN	35
Hardness after 24 hours curing	shore D	min 75

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<sup>\*\*</sup>coverage may vary depending upon the surface conditions



Lapox Epogrout is a 3-component, stain-free, waterproof epoxy tile grout especially designed for filling tile joints in wall and floor applications of ceramic tile, vitrified tile, mosaic, stone and structural glazed blocks. It is available in attractive shades.



STAIN-FREE, WATERPROOF EPOXY TILE GROUT FOR WALLS AND FLOORS

# Benefits

- 100% stain-free and waterproof tile grout
- anti-bacterial and anti-fungal
- can be easily cleaned with water
- does not sag and therefore ideal for vertical applications
- easy to apply, non-shrink and crack-free tile grout
- resistant to many acids, alkalis, corrosive chemicals, salt water, oils and fats

# **Applications**

- tile joints in kitchens, bathrooms and swimming pools
- high footfall areas in homes, institutions and industries
- food processing units

# Coverage\*

35 sq ft per kg for 3 mm tile joint width {tile size: 300 mm (length) X 300 mm (width) X 10 mm (thickness)}

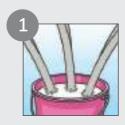
\*coverage may vary depending upon the surface conditions, width and depth of tile joints



# Pack size

Unit	Hardener (Part A)	Resin (Part B)	Filler (Part C)
1 kg	70 g	180 g	750 g
5 kg	360 g	900 g	3740 g

# **Application process**



Thoroughly mix (by weight) the hardener (Part A), resin (Part B) and filler (Part C).



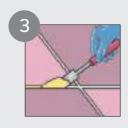
Remove the excess grout material from joints. Clean the tiles with wet sponge after 10 - 15 minutes of application.



Add filler gradually while mixing until a homogeneous paste is obtained.



Allow tile joints to dry before subjecting to foot traffic.



Fill the tile joints with the help of a squeegee trowel within its pot life.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# **Technical details**

Properties	Unit	Range
Initial setting time	hours	minimum 3
Lap shear strength after 24 hours	kg/cm²	minimum 120
Compressive strength after 24 hours	kg/cm²	minimum 500
Compressive strength after 7 days	kg/cm²	minimum 800
Sag resistance test at 25 °C	-	no sagging
Hardness	shore D	minimum 80
Water absorption after 24 hours	%	maximum 0.5
Foot traffic	hours	24
Heavy traffic	hours	72

# Available shades







grey



black







terracotta



sauterne



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**EPOXY SYTEM FOR** WATERPROOFING AND REPAIRS

# Benefits

- creates a solid barrier against water penetration and thus provides long lasting and durable waterproofing solution
- does not shrink
- high penetrating ability to fill pinholes in porous materials due to low viscosity
- provides excellent adhesion and high bonding strength
- resistant to oils, fuels and most chemicals
- resistant to vibrations
- addition of filler reduces the system cost considerably
- certified by CFTRI for food grade applications

# **Applications**

- waterproofing of terraces, bathrooms and water tanks
- anti-corrosive coating for steel bars
- bonding old and new concrete and repairing concrete structures
- grouting of core-cut in bathrooms
- primer coat and screed for epoxy flooring



# Pack size

1.5 kg | 7.5 kg | 45 kg

# Coverage\*

Primer application:

40 sq ft for 200  $\mu$  thickness per kg Screed application:

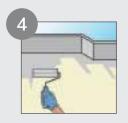
4 - 4.5 sq ft for 1 mm thickness per kg

\*coverage may vary depending upon the surface conditions

# Application process for terrace waterproofing



Thoroughly clean the surface.



Protect the waterproof coating by applying Lapox Procoat, a UV resistant coating.



Check for hollow portions and major cracks and fill them with mortar mixed with Lapox Lacrete. Fill the wall-to-floor joints (angle fillets) with the same mortar.



For optimum results, allow the system to cure for a minimum of 48 hours.



Thoroughly mix Lapox Lacrete resin and hardener in a 1:0.5 ratio and apply the waterproofing coating on the terrace.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# **Technical details**

Properties	Unit	Range
Mixing properties		
Mixing ratio	w/w	100:50
Mixing ratio	V/V	2:1
Mix viscosity at 25 °C	cPs	800 - 1,200
Pot life at 25 °C (100 g mixed mass)	minutes	65 - 85
*Coverage for primer application (200 μ per coat)	g/m²	250 - 300
*Coverage for screed application	kg/m² per mm	2.3 - 2.8
Curing characteristics (for 250 $\mu$ film) - drying time at 25 °C		
Surface dry	hours	5
Touch dry	hours	8
Mechanical properties		
Lap shear strength (Al/Al) at 25 °C, after 24 hours curing	kg/cm²	min 90
Water absorption	%	max 0.5
Hardness after 24 hours curing	shore D	min 75
**Compressive strength (with Quartz Sand no. 10)	kg/cm²	800 - 900
**Flexural strength (with Quartz Sand no. 10)	kg/cm <sup>2</sup>	150 - 250
**compressive and flexural strength after curing for 7 days at 30 $^{\circ}$ C - 13 -		

<sup>\*\*</sup>compressive and flexural strength after curing for 7 days at 30 °C

# **LAPOX**° **PROCOAT**

Polyurethane coating is a tough, protective paint applied on exterior and interior structures that are exposed to extreme weather such as scorching heat, gusty winds and pouring rain. Lapox Procoat is a two-component, acrylic polyol and aliphatic isocyanate based polyurethane coating designed to protect the base waterproof layer as well as decorate the substrate.



UV AND ABRASION RESISTANT PU COATING

# **Application process**



Ensure that the substrate is dry, clean and free of contaminants such as oil and grease. In case of previous epoxy or PU coating, ensure the substrate to be sufficiently roughened prior to coating.



Apply Lapox Lacrete as a primer and waterproof coat.



Stir the resin and hardener separately. Mix hardener gradually into the resin under continuous stirring in a ratio of 4:1 (resin:hardener) with the help of a power-driven stirrer until a homogeneous paste is achieved.



Lapox Procoat may be applied in 1 or 2 coats after 8 hours of Lapox Lacrete application depending upon the substrate.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Benefits

- abrasion resistant
- dirt resistant
- provides glossy effect
- heat resistant coating
- UV resistant
- weather resistant

# **Applications**

Lapox Procoat can be used as a top coat on

- the terraces waterproofed by Lapox Lacrete
- steel and other surfaces exposed to corrosive, marine and chemical environments

# Pack size

5 litres

# Available shades



golden yellow















dark violet





sea green



120 - 160 sq ft per kg (30 - 40 microns)

\*coverage may vary depending upon the surface conditions

# **Technical details**

Properties	Range
Composition	Acrylic polyol resin with isocyanate hardener with suitable pigmentation
Colour	Available in various shades
Gloss	Glossy
Volume solids	Approximately 45%
Mixing ratio	4:1 (resin:hardener)
Pot life at 25 °C	6 - 8 hours
Drying time at 30 °C	Surface dry: 1 hour
	Hard dry: 16 hours
	Full cure: 7 days
Hardener	Use Lapox Procoat hardener only
Recommended DFT per coat	30 - 40 microns
Flash point	Resin: 24 °C Hardener: 24 °C

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Lapox Ultrabond is a superior quality solvent cement for joining PVC, UPVC and CPVC pipes and fittings which makes strong, waterproof and durable joints. None of the solvent-cements are interchangeable, as each one is specific for its pipe.



SOLVENT CEMENT FOR PIPES AND FITTINGS

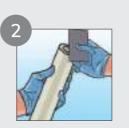
# **Application process**



Use the specific solvent cement according to type of the pipe.



Apply Lapox Ultrabond solvent coat to the outer surface of the fitting with the help of a soft brush. Assemble the cemented parts immediately while the solvent coat is still wet.



Cut the pipe in length; ensure that the cut edges are made smooth using sand paper.



Twist the pipe fully into the fitting by a quarter turn to evenly distribute the solvent coat. Strengthen the joint by holding it for a minimum of 60 seconds.



Shake and stir the content well before use.



Allow the joint to cure sufficiently before handling. Wipe off the excess solvent with a cloth.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Benefits

- fast setting
- high strength
- low VOC
- strong, waterproof and durable joint

# **Applications**

# PVC solvent

Pipes and fittings used for

- irrigation
- potable water pipes
- sewers
- suitable for 4" diameter schedule 40 pipes

## CPVC solvent

CPVC pipes and fittings used for cold and hot water up to a maximum of 180 °F (82 °C) installed in

- commercial spaces
- industrial premises mobile homes
- residential complexes
- suitable for 0.5" 2" pipes and fittings
- conforms to ASTM F 493 standard

# UPVC solvent

UPVC pipes and fittings used for

- conduits
- irrigation
- potable water pipes sewers
- suitable for 6" schedule 40 pipes and 4" schedule 80 pipes
- conforms to ASTM D 2564 standard



# Pack size

PVC

20 ml | 50 ml | 100 ml | 200 ml | 500 ml | 1 litre

UPVC and CPVC

20 ml | 50 ml | 100 ml | 200 ml

# Technical details

Properties	PVC	CPVC	UPVC
Colour	Clear	Yellow	Clear
Specific gravity at 25 °C	0.85	0.96	0.9
Brookfield viscosity at 25 °C	minimum 120 cPs	minimum 1,300 cPs	minimum 600 cPs
Hydrostatic burst strength (rupture resistance)	410 psi	440 psi @ 23 °C	440 psi

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Lapox Ultraseal is a two-component, room temperature setting, easy to use multi-purpose epoxy putty for plumbing and non-plumbing applications.



# Benefits

- ideal for repairs due to its quick setting time
- bond can withstand temperature of up to 120 °C
- can be moulded in different shapes
- can be sanded, drilled and painted
- creates rock hard sealing bond
- high tensile and shear strength
- no shrinkage
- ready for use within one to two hours of application
- resistant to most commonly used solvents

# **Applications**

## General

- sealing leakages of water pipelines and storage tanks
- bonding metal, masonries, bricks, glass, rubber, fibreglass, composite, stone, marble and many rigid plastics
- fixing loose screws on walls
- joining broken ceramic, wooden and household items

# Automobile

- filling dents and cracks
- sealing leakages in radiators, fuel tanks, silencers and metal strips



# Electrical

- insulating electrical connections
- moisture proofing CI and cable joints
- sealing fuse and choke units of mercury lamps
- sealing leakages in transformer systems to prevent oxidation
- sealing motor terminals, balancing motors and frameworks

# Civil engineering

- filling and repairing ceramic
- sealing water supply mains, concrete and sewage pipelines

# Pack size

Fast setting (available in jar pack)

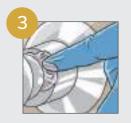
25 g | 60 g | 90 g

General purpose 1 kg

# Application process to stop plumbing leakages



Ensure that the surface is dry, clean and free of oil, grease and other contaminants. The surface must be abraded with a coarse emery paper or chemically etched paper.



Apply homogeneous mass within 2 - 3 minutes of kneading. Smoothen epoxy putty when it is sticky with a wet cloth or by pressing a polythene sheet on it.



Mix the resin and hardener putty
- twist or cut off equal amount (1:1) of the resin and hardener putty
- roll and knead the putty until the colour is black.



Peel off the polythene sheet after curing. Initial setting time is 60 minutes after application at 27 °C. Unused resin and hardener should be repacked in respective wrappers as they have a shelf life of one year from the month of manufacture.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Technical details

Properties	Unit	Range
Mixing ratio	w/w	1:1
Mix colour	visual	Light grey
Mix density	gm/cc	2.40 - 2.60
Solid content (by weight)	%	100
Working time at 25 °C	minutes	15 - 20
Initial hardening time	minutes	30 - 40
Lap shear strength (Al/Al) at 25 °C, after 24 hours curing	kg/cm²	min 70
Hardness after 24 hours curing	shore D	min 80
Water absorption	%	max 0.5
Compressive strength	kg/cm²	min 400
Di-electric strength at RT	KV/mm	min 10





# CYANOACRYLATE ADHESIVE

# Application process to bond marble temple



Ensure that the surface is dry, clean and free of oil, grease and other contaminants. The surface must be abraded with a coarse emery paper or chemically etched paper.



Apply sufficient pressure to ensure that the adhesive spreads into a thin film. Do not disturb or re-align the components until curing is achieved. Any surplus adhesive can be removed with a cleaner.



Apply the adhesive sparingly onto the surface (usually 1 drop is sufficient). Align the components properly and quickly bring them in contact.

Note: for difficult or porous surfaces, an activator is recommended. Apply polyolefin primer on the surface prior to bonding to polypropylene, polyethylene, PTFE or silicone surface

# Benefits

- instant bonding
- bonds well using contact pressure only. No clamping is required
- cost effective; less quantity of adhesive is required to form a strong bond
- resists most chemicals including gasoline, kerosene and various oils
- no solvent evaporation or hazardous vapour emissions
- compatible with wood dust

# **Applications**

- bonding marble, glass, metal, wood, gift articles and handicraft
- PVC door and furniture gap filling
- flex banner bonding on MS frames

# Pack size

20 g | 50 g



# **Technical details**

Properties	Unit	Range
Viscosity	mPas	max 5
Flash point	°C	84
Solubility	-	Nitro methanol, acetone, dimethylformamide
Service temperature	°C	-55 to 82
Cure speed on MS - MS joint	seconds	≤ 20
Lap shear strength (MS/MS) at 25 °C, after 1 hour curing	kg/cm²	min 90

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Lapox Granito JR 150 | JH 350 is a two-component, modified epoxy based system. It is best suited for treatment of Italian marble and granite as it shows excellent penetration and gloss properties after curing.



EPOXY SYSTEM FOR COATING AND CRACK FILLING OF MARBLE

# Benefits

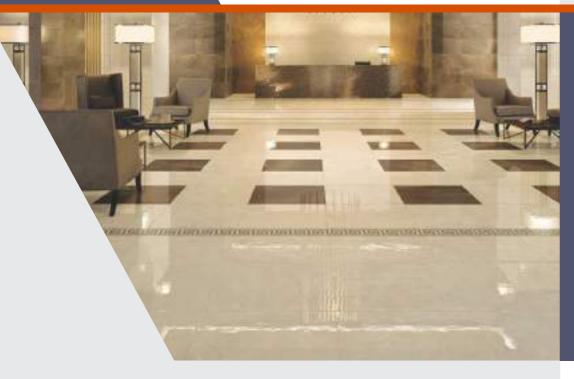
- clear and transparent coating
- enhances natural appearance of marble and granite
- compatible with pigments
- free from solvent and unpleasant odour
- low viscosity results in good penetration into cracks
- strengthens marble
- water and chemical resistant

# **Applications**

- embellishing stone surfaces
- coating and crack filling in natural marble, Italian marble and granite
- stone casting

# Pack size

1.25 kg | 5 kg | 10 kg | 250 kg



# Coverage\*

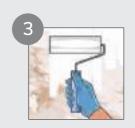
100 - 110 sq ft per kg

\*coverage may vary depending upon the surface conditions

# **Application process**



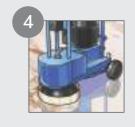
Use '0' number grinder to polish and clean the marble slab. Wipe off the marble surface with a clean cloth. Ensure that the surface is free of dirt, oil, grease and moisture. Inadequately treated substrates may not show satisfactory results.



Micro | hair line crack treatment: apply the mixed material on the complete surface of marble with the help of a metal spatula or a roller. Apply as many coats as required, depending upon the nature of cracks on the surface.



Thoroughly mix the resin and hardener in a ratio of 1:0.25 in a disposable bowl. Dispense the mixed material into the cracks. Pigmentation can be done by adding suitable pigment in the resin.



Allow it to cure in daylight for 24 hours. Use grinding disc from 1 - 5 to polish the treated slab.



Faster productivity can be achieved if curing is done at a higher temperature (40 °C - 60 °C).

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Technical details

Properties	Unit	Range
Mixing ratio	w/w	100:25
Mixing ratio	V/V	4:1
Mix viscosity at 25 °C	cPs	200 - 300
Pot life at 25 °C (100 g mixed mass)	minutes	35 - 45
Surface dry at 42 ± 1 °C (for 200 μ film)	hours	1.5 - 2
Touch dry at 42 $\pm$ 1 °C (for 200 $\mu$ film)	hours	2.5 - 3
Water absorption (24 hours immersion)	%	max 0.4
Hardness after 24 hours curing	shore D	min 70
Optical clarity	visual	excellent
Tg, RT curing for 24 hours	°C	50 - 55

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# **LAPOX**° TIGHTSEAL



Lapox Tightseal is a polytetrafluoroethylene (PTFE) film tape commonly used in plumbing for sealing pipe threads. It also works as a deformable filler and thread lubricant to seal the joints. It protects threads of both parts from coming into direct contact with each other and thus avoids physical wear.



Lapox Ultraseal White is a multi-purpose, epoxy-based, white colour putty. It is a versatile plumber's putty that can be used to fill gaps and seal joints in plumbing and sanitary line applications.



# Benefits

- adequately stretchable and easy to tighten
- does not tear easily

# **Applications**

- prevents leakages in plumbing pipes, bathroom fittings such as faucets, angle valves and kitchen sink joints
- prevents leakages in RO water purifiers, washing machines, gas cylinders, commercial applications such as pressure water systems, central heating systems, air compression equipments, gas pipelines and AC ducting



# Pack size

4 metres | 8 metres

# Benefits

- ideal for repairs due to its quick setting time
- can be moulded in different shapes
- can be sanded, drilled and painted
- creates rock hard sealing bond
- high tensile and shear strengthno shrinkage
- bond can withstand temperature of up to 120 °C

# **Applications**

- fills gaps between ceramic and tiles in washbasins
- seals joints between ceramic fixtures and sanitary lines like commode outlets
- arrests plumbing leakages
- fills gaps in wood, metal working and seals weld joints

# Pack size

50 g



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Polygrip HVAC is a special synthetic adhesive, which is best suited for duct systems and duct-liners for commercial, industrial and residential insulation systems. Polygrip HVAC comes in three variants - Unique, Classic and Lite.



# Benefits

- excellent adhesion to a variety of substrates
- excellent bond strength
- long lasting and durable bonding
- mild odour
- no harmful benzene
- superior water resistant

# **Applications**

- AC ducting
- acoustic insulation
- chilled water piping
- under-deck insulation\*

# Pack size

5 litres 30 litres

# **Application process**



Ensure the surface is completely clean, dry and free of oil, grease and foreign particles.



Leave it to become touch dry so that there are no air pockets.



Stir the adhesive well before use.



Bond the substrates with firm and uniform pressure.



Uniformly apply Polygrip HVAC adhesive on both the substrates with the help of a brush or a spreader.



Optimum bond strength is developed after 24 hours in ambient conditions.

Note: all application tools should be cleaned with a solvent such as acetone before the adhesive cures permanently on the tools

# Technical details

Properties	Unit	Range	
Polygrip HVAC Unique			
Appearance	-	Brown, viscous liquid	
Density at 30 °C	g/ml	0.83 - 0.89	
Viscosity at 30 °C	cPs	1,800 - 2,600	
Temperature resistance	°C	- 20 to + 85	
*Coverage	m²/litre	4 - 5	
Polygrip HVAC Classic			
Appearance	-	Light yellow, viscous liquid	
Density at 30 °C	g/ml	0.82 - 0.86	
Viscosity at 30 °C	cPs	1,050 - 1,500	
Temperature resistance	°C	- 20 to + 85	
*Coverage	m²/litre	6 - 7	
Polygrip HVAC Lite			
Appearance	-	Light yellow, viscous liquid	
Density at 30 °C	g/ml	0.78 - 0.83	
Viscosity at 30 °C	cPs	800 - 1,000	
Temperature resistance	°C	- 20 to + 80	
*Coverage	m²/litre	7 - 8	

<sup>\*</sup>coverage is calculated using a spreader under ideal laboratory conditions with single side application on a smooth, non-absorbent substrate. It may vary with the type of substrate and ambient conditions

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<sup>\*</sup>mechanical fasteners are recommended for under-deck insulation.