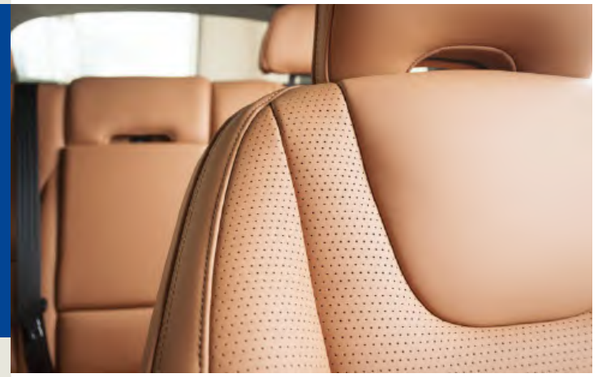
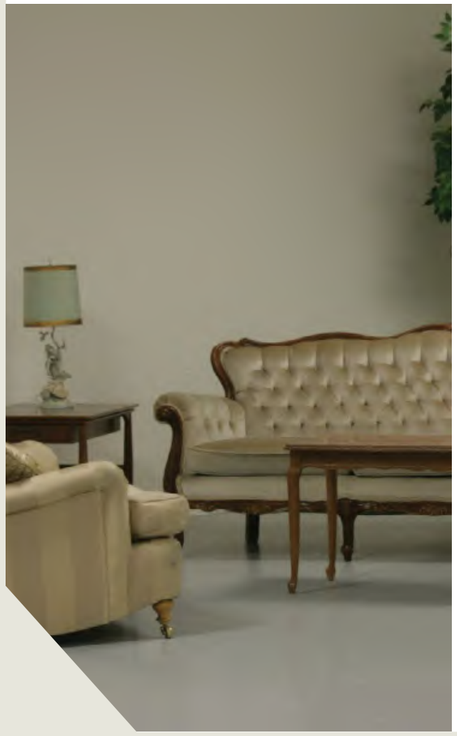
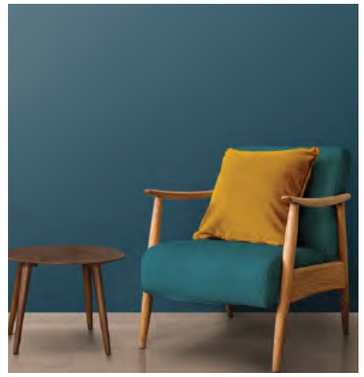
polygrip®
synthetic rubber and PU adhesives

Premium range of adhesives for upholstery and furniture industries




Head office
Atul 396 020, Gujarat
India
(+91 2632) 230000

Marketing office
Atul House
310 B, Veer Savarkar Marg, Dadar (West)
Mumbai 400 028, Maharashtra
India
(+91 22) 62559700

For queries or suggestions, write to
bond@atul.co.in or call (+91) 96193 73700 | www.atul.co.in

bird's eye view of Atul's first site

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, 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.

Aromatics | Bulk Chemicals and Intermediates | Colors

Crop Protection - Bulk Actives | Crop Protection - Retail

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.

Floras | Pharmaceuticals

Polymers - Performance Materials | Polymers - Retail

Polygrip range of premium adhesives for Upholstery and Furniture industry

Furniture plays a significant role in the interior designing of a house. Selection of the right furniture for different rooms is a challenge as it not only must match with the mood of the room, the decor and individual taste, it also needs to be of good quality, durable and long-lasting. Custom designed furniture is trending today. Designer chairs and sofas are made to order according to taste and interior space of the house.

Upholstery is the manual art of designing and ensuring comfort with durability of furniture. It is an art, which the craftsmen use to design new furniture and also to restore the beauty of traditional antique furniture.

BRUSHABLE UPHOLSTERY ADHESIVES

polygrip® SR 409

FAST DRYING FOAM ADHESIVE

Polygrip SR 409 is a light coloured, fast drying, synthetic rubber based adhesive. It is specially designed for foam-to-foam bonding to manufacture chairs, mattresses and sofas. It provides excellent film formation with high tack and immediate bonding resulting in faster productivity.

Benefits
Fast drying
Strong bond
High coverage
Mild odour
Soft glue line

Applications
Mattresses
Sofas
Chairs

Pack size	500 mL	1 L	2 L
	5 L	30 L	

Typical technical data

Test parameters	Typical range
Colour and appearance	Light yellow, viscous liquid
Density at 30°C	0.80 - 0.85 g/mL
Viscosity at 30°C	800 - 1,000 cPs
Tack retention time*	Maximum 30 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Apply Polygrip SR 409 uniformly on both the substrates.
4. Press both the surfaces together ensuring uniform contact once the adhesive becomes tack-free.

Optimum bond strength is achieved after 24-hour curing at room temperature.

polygrip® S 709

LONG TACK RETENTION ADHESIVE

Polygrip S 709 is a dark brown, synthetic rubber-based adhesive. It is a multi-purpose adhesive suitable for bonding a variety of substrates such as canvas, foam, paper, plastic, velvet and wood.

Benefits
Long tack retention time
Excellent tack quality
Mild odour
Good coverage
Good bond strength

Applications
Sofas
Chairs
Furniture
Automobile interiors

Pack size	100 mL	200 mL	500 mL	30 L
	1 L	2 L	5 L	

Typical technical data

Test parameters	Typical range
Colour and appearance	Dark brown, medium viscous liquid
Density at 30°C	0.80 - 0.84 g/mL
Viscosity at 30°C	1,000 - 1,500 cPs
Tack retention time*	Maximum 30 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Method of application

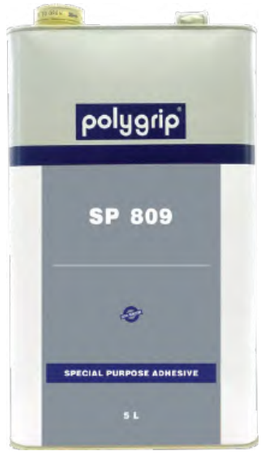
1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Apply Polygrip S 709 uniformly on both the surfaces.
4. Allow evaporation of solvents from both the surfaces for about 5 - 10 minutes at room temperature to develop tack.
5. Press both the surfaces together ensuring uniform contact once the adhesive becomes touch-dry.

   Optimum bond strength is achieved after 24-hour curing at room temperature.

polygrip® SP 809

MULTI-PURPOSE ADHESIVE

Polygrip SP 809 is a yellow synthetic rubber-based adhesive. It is a multi-purpose adhesive, suitable for bonding a variety of substrates such as automobile interiors, foam, furniture, handicraft, laminate, non-woven carpets for flooring, PVC, rubber and wood.



Benefits
Good coverage
High bond strength
Mild odour
Multi-purpose applications
Excellent water resistance

Applications
Carpets
PVC floorings
Sofas
Mattresses
Furniture
Automobile interiors

Pack size	5 L	30 L

Typical technical data

Test parameters	Typical range
Colour and appearance	Light yellow, medium viscous liquid
Density at 30 °C	0.82 - 0.86 g/mL
Viscosity at 30 °C	1,050 - 1,500 cPs
Tack retention time*	Maximum 30 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Apply Polygrip SP 809 uniformly on both the substrates.
4. Allow the solvent to evaporate for 5 - 10 minutes in order to develop tack.
5. Press both the surfaces together ensuring uniform contact, once the adhesive becomes dry.

Optimum bond strength is achieved after 24-hour curing at room temperature.

Speed is the norm today. Adoption of modern technology is required to achieve speed in mass production. Sprayable adhesives present options to upgrade from traditional adhesives.

polygrip® RAPID

FAST BONDING SPRAYABLE ADHESIVE

Polygrip Rapid is a synthetic polymer-based adhesive for spray application. It offers low viscosity, quick drying time with maximum tack retention time of five minutes. The adhesive is capable of bonding a variety of substrates such as foam-to-foam, foam-to-wood, foam-to-rexine, fabric and non-woven carpets for furniture and automobile industries. It offers instant bonding which is suitable for the quick production of components for various industries.

Benefits	Substrates	Applications
High productivity	Bonding foam wood rexine non-woven carpet fabric	Sofas
Mild odour		Mattresses
Quick strength development		Executive chairs
Instant tack		Automobiles (non-woven fabric)

Pack size	4.5 L	15 L	30 L

Typical technical data

Test parameters	Test method	Typical range
Colour and appearance	Visual	Yellow to brownish liquid
Density at 30 °C	-	0.80 - 0.85 g/mL
Viscosity at 30 °C	ASTM D 2196	50 - 150 cPs
Tack retention time*	-	Maximum 5 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Spray the adhesive on both the surfaces by using an air-supported gun with an orifice diameter of 1.5 - 2 mm at an air pressure of 45 - 55 psi.
4. Allow the solvent to evaporate for one minute.
5. Press both the surfaces together ensuring uniform contact.

   Optimum bond strength is achieved after 24-hour curing at room temperature.

polygrip® **SP 1**

HIGH STRENGTH FAST BONDING SPRAYABLE ADHESIVE

Polygrip SP 1 is a specially developed light yellow coloured, fast bonding, sprayable synthetic rubber-based adhesive. It is used by automobile OEMs and ancillary units. It is also recommended for upholstery applications such as chairs, mattresses and sofas due to its ease of application. It offers low viscosity with excellent tack properties. It gives high strength and fast bonding to various substrates.

Benefits	Substrates	Applications
Mild odour	Bonding foam	Mattresses
High productivity	wood	Sofas
Quick strength development	rexine	Executive chairs
Instant tack	non-woven carpet	Automobiles (roof linings, door trims and non-woven carpets)
	painted metal	Generator canopies
	MS	Luggage
	FRP	
	ABS	
	PVC foam	
	fabric	

Pack size	30 L

Typical technical data

Test parameters	Test method	Typical range
Colour and appearance	Visual	Light yellow, low viscous liquid
Density at 30°C	-	0.78 - 0.87 g/mL
Viscosity at 30°C	ASTM D 2196	100 - 200 cPs
Tack retention time*	-	Maximum 30 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Spray the adhesive on both the surfaces by using an air-supported gun with an orifice diameter of 1.5 - 2 mm at an air pressure of 45 - 55 psi.
4. Allow the solvent to evaporate for five minutes.
5. Press both the surfaces together ensuring uniform contact.

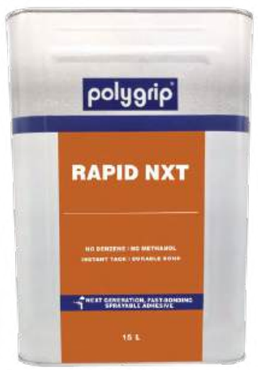
Optimum bond strength is achieved after 24-hour curing at room temperature.

polygrip® RAPID NXT

MULTI-PURPOSE FAST BONDING NEXT GENERATION PREMIUM SPRAYABLE ADHESIVE

Polygrip Rapid NXT is a synthetic polymer-based adhesive for spray application. It offers low viscosity, quick drying time with maximum tack retention time of eight minutes. The adhesive is ideal for chair and large size sofa manufacturing applications, which require long tack time and strong bonding for curved edges. It is suitable for premium mattress manufacturing where multiple layers of bonding is required.

Benefits	Substrates	Applications
High productivity	Bonding foam	Sofas
Mild odour	wood	Mattresses
Quick strength development	rexine	Executive chairs
Instant tack	non-woven carpet fabric	Automobiles (non-woven fabric)

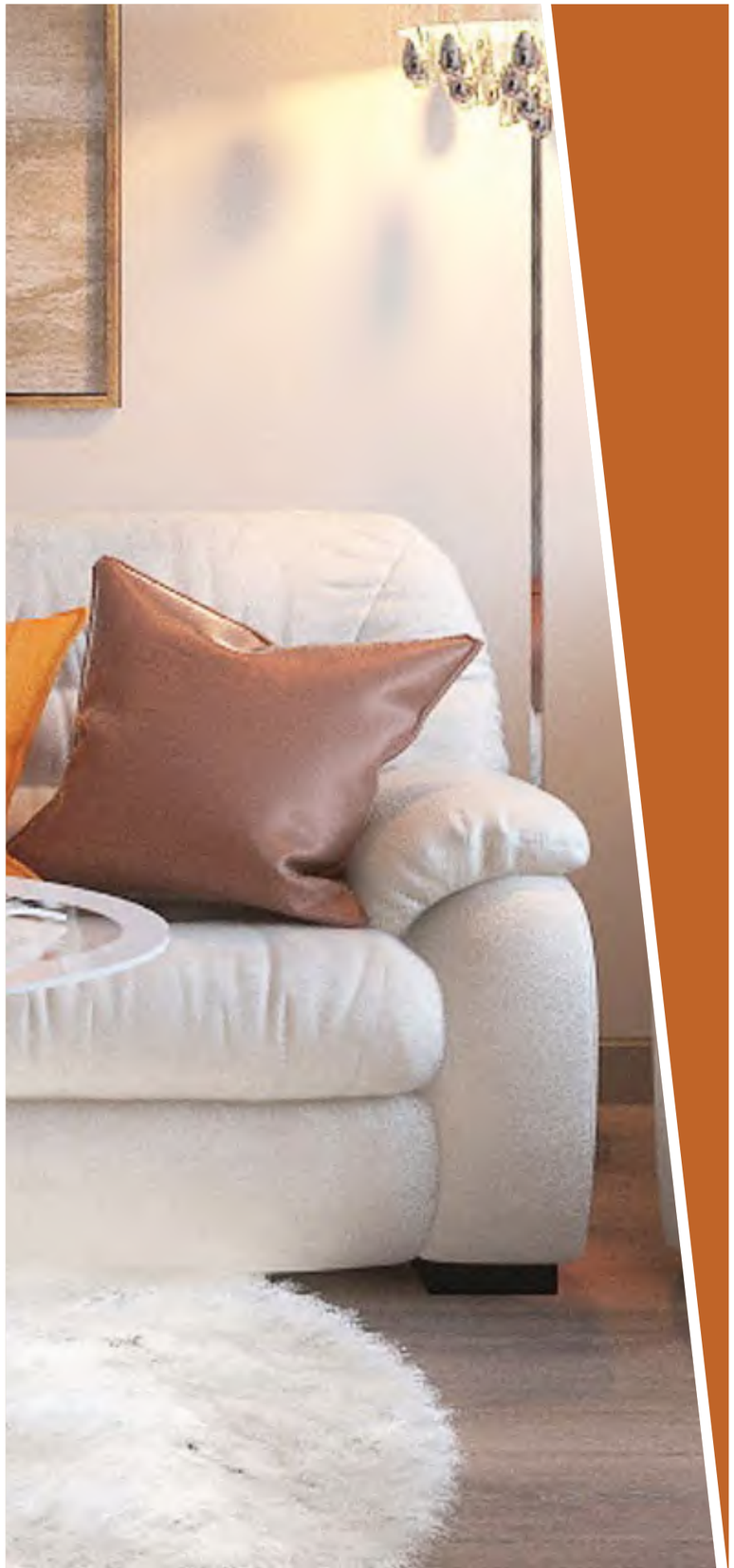


Pack size	15 L	30 L

Typical technical data

Test parameters	Test method	Typical range
Colour and appearance	Visual	Yellow to brownish liquid
Density at 30 °C	-	0.78 - 0.81 g/mL
Viscosity at 30 °C	ASTM D 2196	50 - 150 cPs
Tack retention time*	-	Maximum 8 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.



Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Spray the adhesive on both the surfaces by using an air-supported gun with an orifice diameter of 1.5 - 2 mm at an air pressure of 45 - 55 psi.
4. Allow the solvent to evaporate for one minute.
5. Press both the surfaces together ensuring uniform contact.

Optimum bond strength is achieved after 24-hour curing at room temperature.

Today customers are not only seeking functional utility from furniture, but also want to assert a style statement of their own. Varied choices of materials such as plywood, wood and different designs of expensive laminates assert this style statement. Hence, using the best quality furniture adhesive is of utmost importance.

polygrip® HOTBOND

ADVANCE HEAT RESISTANT AND QUICK BONDING ADHESIVE

Polygrip Hotbond is a synthetic rubber-based adhesive designed for quick bonding of ply to laminate in furniture designing which is subjected to high service temperatures of up to 170 °C. Due to its high heat resistance, it exhibits a durable bond in high temperature conditions.

Benefits	
Mild odour	Good coverage
Quick bonding	High heat resistance up to 170 °C

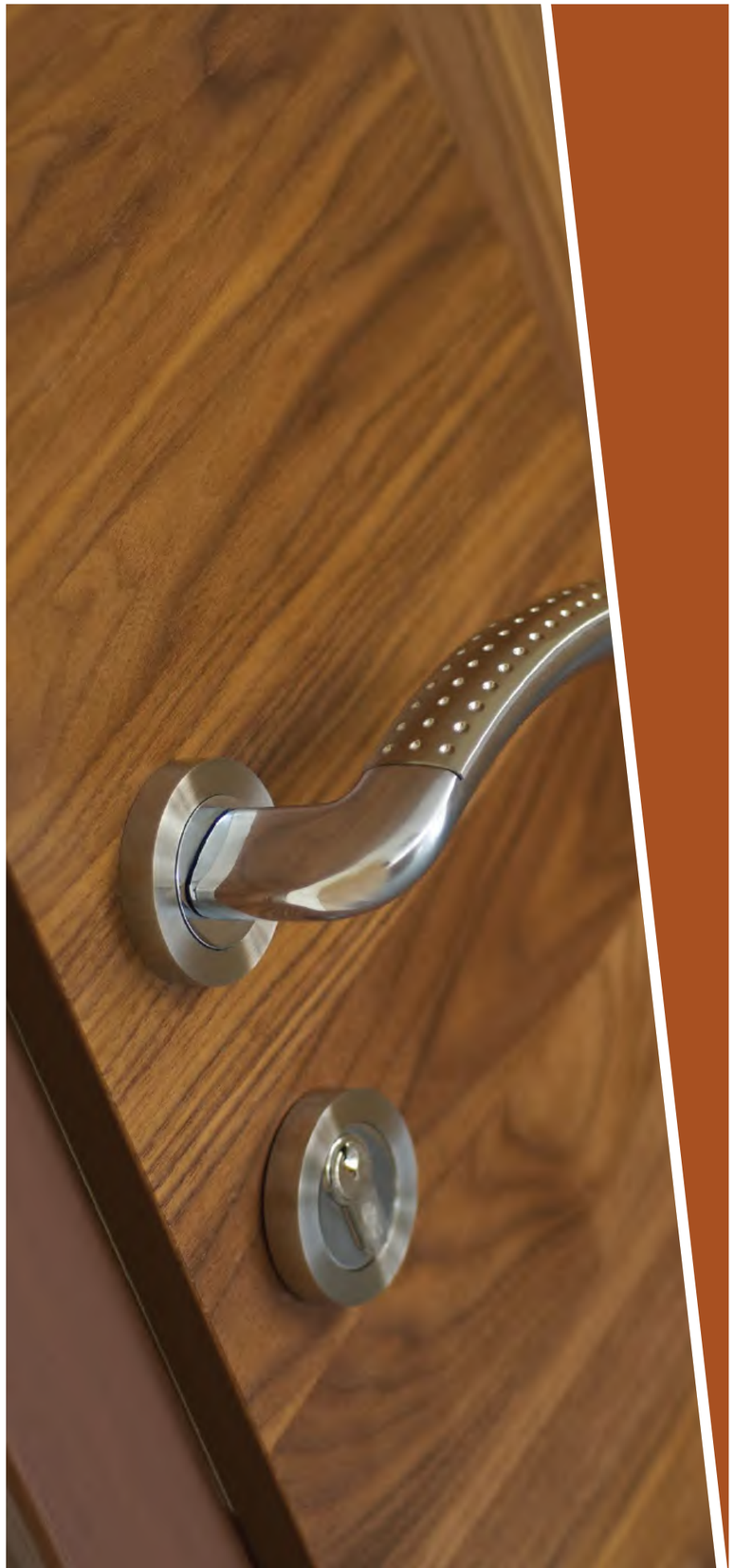
Applications
Bonding laminate to plywood, MDF and particle board
Bonding PVC to plywood, PVC to laminate, laminate to laminate
Particle board, kitchen and oven area

Typical technical data

Properties	Test method	Typical range
Appearance	Visual	Light yellow
Density at 30 °C	--	0.84 - 0.89 g/mL
Viscosity at 30 °C	ASTM D 2196	2200 - 3000 cPs
Tack retention*	--	Maximum 10 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.

Pack size	100 mL	200 mL	500 mL
	1 L		5 L



Method of application

1. Stir the adhesive well to get uniform consistency before application.
2. Use a notched spreader to apply the adhesive.
3. Apply the adhesive in any direction on both the surfaces.
4. Wait for 2 - 3 minutes after applying the adhesive till both the surfaces become touch-dry.
5. Apply strong and uniform pressure on both the surfaces. The edges need stronger ressure, which can be applied with a wooden plank wrapped in a cloth.
6. Keep 2 mm gap between two adjacent laminates for vertical applications. The width of each laminate should be up to a maximum of 2 feet.

polygrip® PLUS 909

HIGH STRENGTH ADHESIVE

Polygrip PLUS 909 is a brownish yellow, synthetic rubber-based adhesive. It is a high strength premium adhesive, suitable for bonding a variety of substrates such as canopies, canvas, foam, furniture, handicraft, laminates and wood.

Benefits
High bond strength
Excellent tack quality
Good coverage
Mild odour
Excellent water resistance

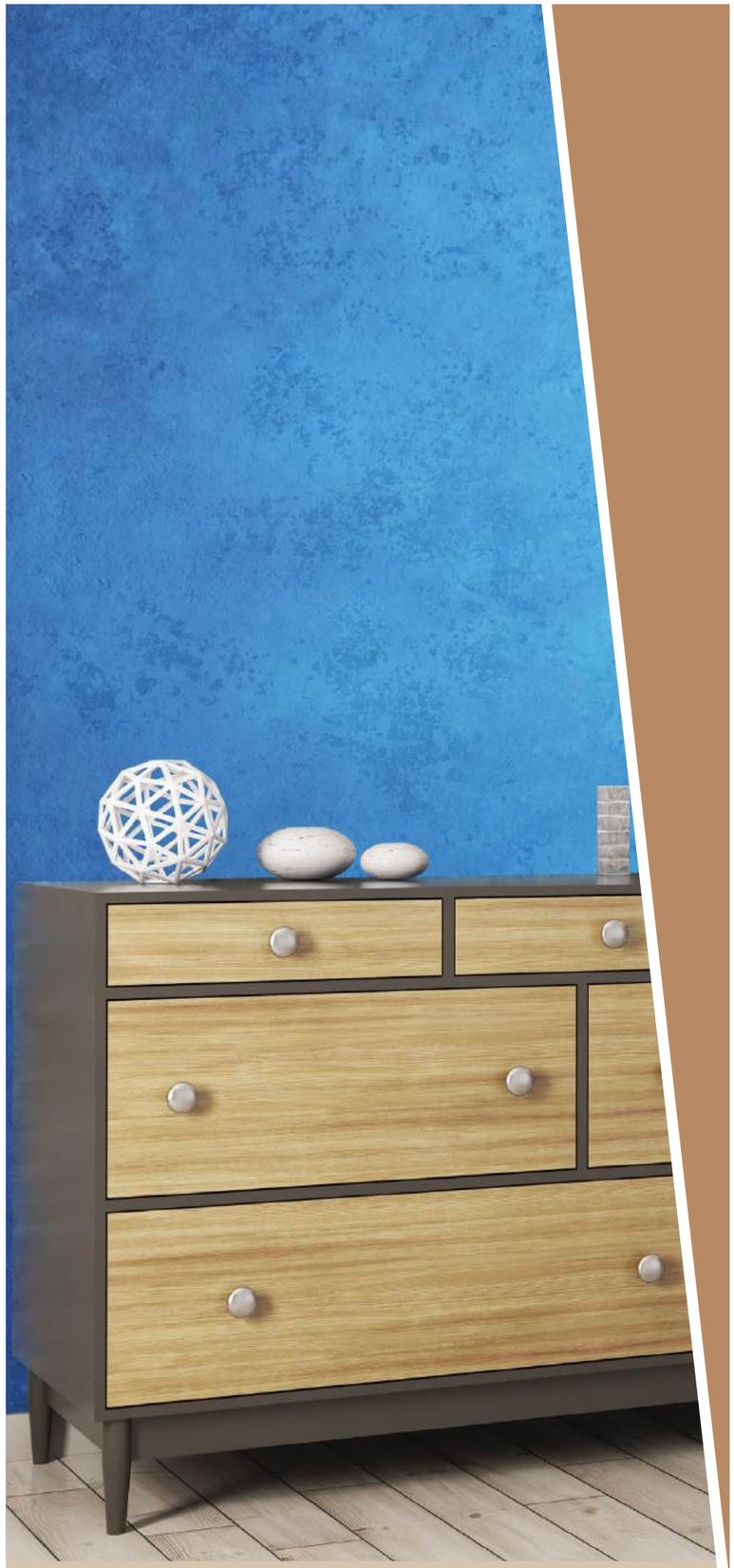
Applications
Furniture
Handicraft
Canopies

Pack size	100 mL	200 mL	500 mL
	1 L	5 L	30 L

Typical technical data

Test parameters	Typical range
Colour and appearance	Brownish yellow, viscous liquid
Density at 30°C	0.83 - 0.89 g/mL
Viscosity at 30°C	1,800 - 2,600 cPs
Tack retention time*	Maximum 30 minutes

*Tack retention time (open time) is the time required for evaporation of solvent, once a thin film of adhesive is applied on the surface. It may vary depending upon room temperature and humidity.



Method of application

1. Stir the adhesive well.
2. Ensure that the surfaces to be bonded are clean, dry, free of oil and grease stains.
3. Uniformly apply Polygrip PLUS 909 on both the surfaces.
4. Allow the solvent to evaporate for 5 - 10 minutes in order to develop tack.
5. Press both the surfaces together ensuring uniform contact, once the adhesive becomes touch-dry.

   Optimum bond strength is achieved after 24-hour curing at room temperature.