



# Premium range of adhesives for the upholstery and furniture industry





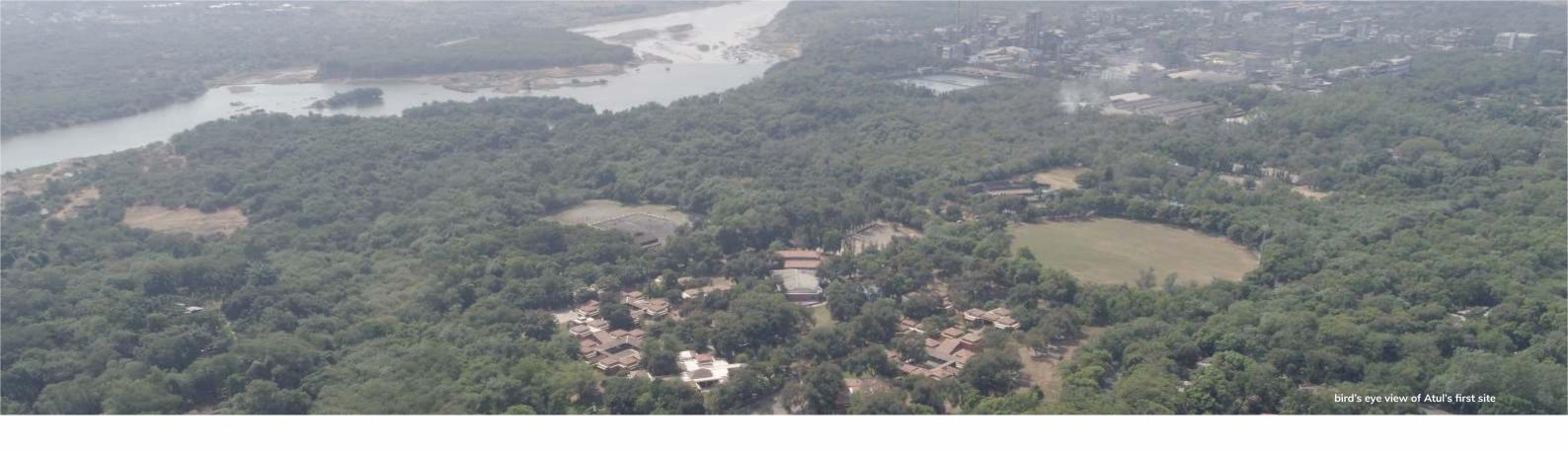












Founded by Mr Kasturbhai Lalbhai on September 05, 1947, Atul Ltd (Atul) is one of the largest integrated chemical companies of India. The Company manufactures about 900 products and 400 formulations and owns 140 brands. Atul serves 4,000 customers belonging to over 30 industries in approximately 90 countries 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.



- 3 -





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, sofas and enables faster productivity through excellent film formation, high tack and immediate bonding.



Applications	
Mattresses	
Sofas	
Chairs	
Mattresses Sofas	



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

<sup>\*</sup>Tack retention time (open time) is the time required for evaporation of solvent once a thin film of the 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 substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Uniformly apply Polygrip SR 409 on both the substrates.
- 4 Press both the substrates together ensuring uniform contact once the adhesive becomes tack-free.

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



- 7 -

- 6 -



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.



Applications	
Sofas	
Chairs	
Furniture	
Automobile interiors	



Pa	ıck size	100 mL	200 mL	500 mL	20.1
ru	ICK SIZE	1 L	2 L	5 L	30 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	

<sup>\*</sup>Tack retention time (open time) is the time required for evaporation of solvent once a thin film of the 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 substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Uniformly apply Polygrip S 709 on both the substrates.
- 4 Allow the solvents to evaporate for about 5 10 minutes at room temperature to develop tack.
- Press both the substrates together ensuring uniform contact once the adhesive becomes touch-dry.

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



- 9 -

- 8 -



## SP 809

#### **SPECIAL PURPOSE ADHESIVE**

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







#### 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 the 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 substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Uniformly apply Polygrip SP 809 on both the substrates.
- 4 Allow the solvent to evaporate for 5 10 minutes in order to develop tack.
- 5 Press both the substrates together ensuring uniform contact once the adhesive becomes touch-dry.

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





# MP 609

#### **MULTI-PURPOSE ADHESIVE**

Polygrip MP 609 is a dark brown, synthetic, rubber-based contact adhesive. It is a multi-purpose adhesive suitable for bonding a variety of substrates such as rubber, leather, EVA, rexin, foam and canvas.



Applications
Mattresses
Chairs
Sofas
Carpets



Pack size	500 mL	1 L	5 L	30 L

#### Typical technical data

Test parameters	Typical range
Colour and appearance	Brown
Density at 30 °C	0.78 - 0.82 g/mL
Viscosity at 30 °C	400 - 800 cPs
Tack retention time*	Maximum 30 minutes

<sup>\*</sup>Tack retention time (open time) is the time required for evaporation of solvent once a thin film of the 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 substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Uniformly apply Polygrip MP 609 on both the substrates.
- 4 Allow the solvent to evaporate for five minutes before bonding.
- 5 Press both the substrates together ensuring uniform contact once the adhesive becomes touch-dry.

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



- 12 -





### RAPID

#### FAST BONDING SPRAYABLE ADHESIVE

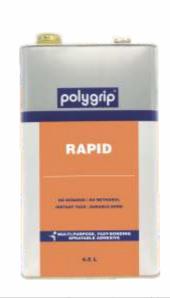
Polygrip Rapid is a synthetic, polymer-based adhesive for spray application. It offers low viscosity, quick drying time with maximum tack retention time of five minutes. The adhesive is capable of bonding a variety of substrates such as foam-to-foam, foam-to-wood, foam-to-rexine, fabric and non-woven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

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

#### 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

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



Pack size	4.5 L	15 L	30 L	
-----------	-------	------	------	--



#### **Method of application**

- 1 Stir the adhesive well.
- 2 Ensure that the substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Spray the adhesive on both the substrates 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 substrates together ensuring uniform contact.

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



- 16 -



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.

Benefits
Mild odour
High productivity
Quick strength development
Instant tack

Substrates	Applications
Bonding	Mattresses
foam,	Sofas
wood, rexine,	Executive chairs
non-woven carpets, painted metals, MS, FRP,	Automobiles (roof linings, door trims and non-woven carpets)
ABS, PVC foam.	Generator canopies
and fabric	Luggage



#### 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

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

Pack size	30 L
-----------	------



#### **Method of application**

- 1 Stir the adhesive well.
- 2 Ensure that the substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Spray the adhesive on both the substrates 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 substrates together ensuring uniform contact.

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



- 18 -



#### NEXT GENERATION, FAST BONDING 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 chairs 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	Sofas
Mild odour	foam, wood,	Mattresses
Quick strength	rexine,	Executive chairs
development	non-woven carpets	Automobiles
Instant tack	and fabric	(non-woven fabric)

# 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

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



Pack size	15 L	30 L	



#### **Method of application**

- 1 Stir the adhesive well.
- 2 Ensure that the substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Spray the adhesive on both the substrates 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 substrates together ensuring uniform contact.

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



- 20 -





#### ADVANCED, HEAT RESISTANT AND QUICK BONDING ADHESIVE

Polygrip Hotbond is a synthetic, rubber-based adhesive designed for quick bonding of ply to laminate 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.

Ben	efits
High bond strength	Low wastage
Faster work due to quick bonding	Can be applied in any direction

Applications
Bonding laminate to plywood, MDF and particle boards
Bonding PVC to plywood, PVC to laminate, laminate to laminate used in kitchens (eg: oven installation)

# POLYGRIP HOTBOND NO SERIZINE I NO METHANOL WITHETANDS UP TO 130 °C WEAT RESISTANT AND QUICK BORDING ADRESIVE 5 L

D. d. d.	100 mL	200	) mL	500 mL
Pack size	1 L			5 L

#### 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	2,200 - 3,000 cPs
Tack retention*	-	Maximum 10 minutes

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



#### **Method of application**

- 1 Stir the adhesive well to get uniform consistency before application.
- 2 Use a notched spreader to apply the adhesive.
- Apply the adhesive in any direction on both the substrates.
- Wait for 2 3 minutes after applying the adhesive till both the substrates become touch-dry.
- 5 Apply strong and uniform pressure on the edges with a wooden plank wrapped in a cloth.
- 6 Keep 2 mm gap between two adjacent laminates in a vertical application and ensure the laminate width is not more than 2 feet.



- 24 -



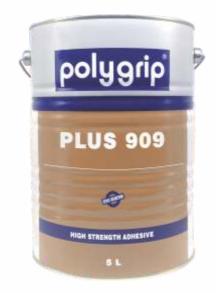
# PLUS 909

#### **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.



Applications
Furniture
Handicraft
Canopies



	100	200 1	F00 1
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

<sup>\*</sup>Tack retention time (open time) is the time required for evaporation of solvent once a thin film of the 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 substrates to be bonded are clean, dry, free of oil and grease stains.
- 3 Uniformly apply Polygrip PLUS 909 on both the substrates.
- 4 Allow the solvent to evaporate for 5 10 minutes in order to develop tack.
- Press both the substrates together ensuring uniform contact once the adhesive becomes touch-dry.

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





#### **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

® Registered trademark of Atul Ltd

Disclaimer: By using or accessing the catalogue | publication, you agree with the Disclaimer without any qualification or limitation.

Atul Ltd reserves the right to terminate, revoke, modify, alter, add and delete any one or more of the information, terms and conditions outlined in the publication. The Company shall be under no obligation to notify the user of the amendment to the terms and conditions and the user shall be bound by such amended terms and conditions.

The information contained in this publication is presented in good faith as per best of our knowledge, however, no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does the Company assume any liability whatsoever arising out of the application or use of any product. It does not constitute part of a legal offer or contract. Users of this data and recommendations are requested to verify the information currently provided. The application, use and processing of our products for the manufacture of finished goods are beyond our control and entirely the responsibility of the consumer. The company will not be liable or be held responsible for any damage arising from the use of the information contained in this document.