# POLYGRIP® RTU



Technical Data Sheet | Polymers Business

## **Description**

Polygrip RTU is solvent based sprayable polyurethane adhesive which is used in combination with hardener Polygrip HR in the specified ratio. The system is recommended bonding PVC sheet to wood for membrane door applications. The system has good area coverage with faster drying solvents, which required for membrane door manufacturing process. It has excellent bonding properties of PCV films to wood, plywood & particle board.

#### Advantages

No harmful benzene

Mild smell Low viscosity Good area coverage Ease of application

Long lasting durable bond and water resistant properties

# **Applications**

Manufacturing of membrane doors

# **Typical specifications**

Properties	Unit	Test method	Values	
			Resin RTU	Hardener HR
Appearance	-	Visual	Transparent	Dark Brown
Density at 30°C	g/ml	-	0.82 - 0.86	0.95 - 1.30
Viscosity at 30°C	cPs	ASTM D 2196	200 - 400	-
Mixing ratio	Parts by weight	-	100	5

## Process of application

Surface preparation: Thoroughly clean PVC foil and wood surface with air jet.

Application: Take 100 parts of Polygrip RTU in a clean container and add 5 parts by weight of hardener Polygrip HR. Mix thoroughly to get homogeneous mixture. The mix thus prepared is suitable to use up to 6 hours at ambient conditions. Spray adhesive on wood surface with Pilot gun (orifice diameter: 1.5 - 2.0 mm) at 40 - 60 psi pressure. Ensure thorough spray on edges, groves & carvings on wood surfaces. Allow adhesive to dry for 20-30 minutes at ambient temperature. In case of porous (absorbing) substrates, apply second spray coat & allow drying for 20-30 minutes at ambient temperature. Assemble the PVC foil on wood surface and press gently. Set the temperature of heating chamber to 110-115°C. Cover the assembled part with silicon sheet & start vacuum pump. Allow components in heating chamber with vacuum for 5-10 minutes. Take out the components and allow cooling at room temperature under vacuum. Release vacuum once component achieve room temperature. Remove excess PVC foil from the edges of component by suitable tools. To achieve full strength, allow components to cure for 24 hours at ambient conditions.

**Precautions** 

Highly flammable

Keep container tightly closed when not in use.

Keep containers away from heat, flame, spark and naked flame.

December 2020 Page 1 of 2

# POLYGRIP® RTU

Technical Data Sheet | Polymers Business





Keep out of reach of children. Use only in well-ventilated area Keep away from moisture.

Over spry of adhesive, low gun pressure & inadequate drying time after spray may lead to blisters & de-lamination of PVC foil from wood surface. Hence uniform spray & sufficient drying time is required.

#### **Packaging**

Polygrip RTU is available in 30 L metal drums. Other packing may be considered on request.

## Storage and handling

Polygrip RTU should be stored in a cool and dry place, preferably in a sealed container and should not be exposed to direct sunlight. This product has a shelf-life of 1 year, if stored in its original container between 18°C and 25°C away from humidity and excessive heat. Please refer to the Safety Data Sheet (SDS) for detailed instructions on storage and handling.

#### Safety

Wear personal protective equipment (PPE). Avoid contact with the eyes and skin. In case of direct contact and irritation, the resin should be washed off immediately with soap and warm water. Avoid breathing vapours, mist or gas. Please refer to the SDS for detailed safety instructions.

### Spills and disposal

In case of spills, sweep up and shovel the spilled material. Keep spilled material in suitable, closed containers for disposal. Soak up with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Do not allow the product to reach the sewage system. Waste must be disposed of in accordance with federal, state or local regulations, as applicable.

#### Contact

E-mail: support\_polymers@atul.co.in

Website: www.atul.co.in

#### Note

Polygrip<sup>®</sup> is a registered trademark of Atul Ltd.

### Manufacturing site

Atul 396 020, Gujarat, India

Telephone: (+91 2632) 230000 | 233261

E-mail: contact@atul.co.in

Disclaimer: The information contained herein is for information purposes only. While enough care is taken in disclosing the information, users of this information are advised to cross-check the same depending upon use | application. Atul Ltd does not give any assurance or warranty or guarantee in regard to the accuracy or completeness of the information and no claim or liability will be accepted or entertained in regard thereto. Atul Ltd makes no warranty of any kind, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or performance or usage of trade.