

AAP™

Anti Abrasion Polyurethane

AFZIR
Advanced Solutions
Strengthening Company

PRODUCT DESCRIPTION

AAP™ is a two-component industrial polyurethane (polyester resin and hardener) coating, forming an isocyanate polyurethane layer upon application. It provides excellent mechanical and physical resistance to environmental and atmospheric conditions, including UV rays, humidity, and pollutants. Due to its high abrasion and scratch resistance, it's often used as a top coat over decorative polyurethanes, epoxy coatings, and natural stone. The polyurethane is transparent, allowing the underlying surface to remain visible.

TECHNICAL DATA

Material	polyurethane
Color	Gray (transparent optional)
Mix Ratio (A:B)	100:35
Weight Solids	60 ± 2%
Volume Solids	55 ± 3%
Coverage	100–150 g/m ²
Drying Time (Surface)	< 3 hours

PRODUCT FEATURES

- High resistance to scratch, abrasion, and impact
- Excellent chemical, water, and oil resistance
- Strong adhesion to various surfaces
- Suitable for both glossy and matte finishes
- Available as clear transparent lacquer
- Can be applied by roller, brush, or spray.

APPLICATIONS

- Industrial painting (machinery, tanks, bridges)
- Topcoat for polyurethane flooring systems
- Traffic markings and surface protection
- Coating for automotive parts and metal components
- Protective finish for wood, concrete, and cement surfaces

APPLICATION STEPS*Surface Preparation:*

- Remove all dust, oil, moisture, salt, and loose material
- Sand or roughen the surface to improve adhesion

Mixing:

- Combine components A and B in 100:35 ratio
- Mix thoroughly with a mechanical stirrer for at least 5 minutes until completely homogeneous

Thinning (If Required):

- Gradually add **polyurethane thinner** to adjust viscosity based on application method and environment



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Application:

- Apply with **airless sprayer, conventional sprayer, roller, or brush**
- Spray overlap should be 50% to ensure even coating
- For small/damaged areas, use a brush for touch-up

Post-Application:

- Clean all tools with thinner immediately after use
- Allow full curing time of 7 days before heavy use

Environmental Conditions During Application

- Ambient Temperature: 10°C – 50°C
- Surface Temperature: 10°C – 60°C
- Surface temperature must be at least 3°C above dew point to prevent condensation
- Ensure good ventilation in enclosed areas

USAGE INSTRUCTIONS

- Adhere strictly to the mix ratio to ensure full curing and performance
- Avoid applying in humid, wet, or dusty environments
- During spraying, maintain consistent, parallel motion
- Provide sufficient airflow during application and drying

SURFACE CONDITIONS*The substrate must be:*

Clean, dry, and free of oil, grease, dust, salts, and moisture

Mechanically roughened using sandpaper or abrasion tools to improve adhesion

Failure to prepare the surface properly can result in poor bonding or premature failure

SAFETY INSTRUCTINS

- Avoid contact with eyes
- Use gloves, safety glasses, and mask
- In case of eye contact: rinse with fresh water and seek medical attention
- If ingested: seek medical help immediately

SHELF LIFE
1 years.