

PolyCryl Plaster Polymer - Product Data Sheet

PolyCryl Plaster Polymer is a high-performance water-based non-flammable acrylic liquid additive designed specifically for use with **Crystacal R Plaster** at a **2.5:1 plaster-to-polymer mix ratio**.

By acting as a powerful binder, PolyCryl has a high acrylic content which transforms alpha plasters into a far more durable material. With increase resistance against brittleness, chipping, and cracking, the finished product also gains improved flexural strength and superior scratch resistance—perfect for both casting and laminating applications.

PolyCryl has a high acrylic content and combined with Crystacal R matches the strength and hardness of Jesmonite AC100 and AC300. PolyCryl provides a durable option for both interior and exterior applications, ensuring lasting performance in any environment, with excellent weather and water resistance. An exterior sealer or varnish is recommended for any extended exterior exposure.

With a demould time of just 25–30 minutes, PolyCryl makes production efficient without compromising quality. It's quick and easy to use—simply mix mechanically using a battery drill and mixing blade for consistent, lump-free results.

Using PolyCryl also means that water and acrylic based pigments disperse very well, giving a deeper and more vivid colour and also it can be easily reinforced with glass fibre materials.

Applications

- Decorative casts and mouldings
- High-impact laminated panels
- Lightweight brick sheet facades
- Thin and lightweight wall panels
- Sculptural work
- Coating for polystyrene and expanded foams

Key Benefits:

- Significantly improves durability of Crystacal R Plaster
- High acrylic content reducing brittleness, chipping & cracking
- Boosts flexural strength for tougher, longer-lasting pieces
- Enhances scratch resistance for a smoother finish
- Fast demould time: 25–30 minutes



**Industrial
Plasters**
Proven Reliability

- Can be cast in thin or thick section
- Excellent detail reproduction
- Excellent weather and water resistance
- Safe and easy to use, water-based, non-flammable, and not classified as toxic or carcinogenic

Performance Characteristics

Property	Value / Description
Mix Ratio (Plaster : Polymer)	2.5 : 1
Demould Time	25–30 minutes
Finish	Smooth, highly detailed
Pigment Compatibility	Excellent with water and acrylic-based pigments
Reinforcement Compatibility	Glass fibre, mesh, or scrim
Exterior Suitability	Sealer recommended
Cement Compatibility	Compatible; improves impact resistance

Packaging & Storage

- **Packaging:** Supplied in airtight plastic containers of various volumes.
- **Storage:** Store in a cool, dry place, away from direct sunlight and frost. Keep container tightly sealed when not in use.

Safety & Handling

- Water-based, non-flammable, and not classified as toxic or carcinogenic
- Avoid contact with eyes and prolonged skin contact
- Use PPE when handling and mixing
- Clean tools with water immediately after use