



# PYROTEK PM COATING 6040 EXP AND PYROTEK PM COATING 6040

## PERMANENT MOULD PROTECTIVE COATINGS

Pyrotek PM Coating 6040 EXP is a very smooth, thick coating with exceptional toughness and durability. PM Coating 6040 is a diluted version of EXP. Both provide protection for permanent moulds and can produce a near-mirror surface finish on a cast part. Pyrotek PM Coating 6040 is non-wetting and non-reactive to molten aluminium and has moderate thermal insulation properties. It can be used without a baselayer or additional coverlayers, and works well with or without an insulating coating such as PM Coating 1000 EXP.

### BENEFITS

- High durability
- Very fine particle size
- Moderate thermal insulation
- Non-wetting to molten aluminium
- Available in concentrate (EXP) or ready-to-use options
- Water-based, free of solvents and volatile organic compounds (VOCs)
- Easily applied with most spray guns
- No additional baselayers or coverlayers are required

### PHYSICAL PROPERTIES

| Property          | Value                        |
|-------------------|------------------------------|
| Active Ingredient | Clay ceramics, boron nitride |
| Carrier           | Water                        |
| Colour            | Beige                        |
| Specific Gravity  | 1.08                         |
| pH                | 8-10                         |
| Shelf Life        | 12 months                    |

### STORAGE

- Store at room temperature in the original container
- 12 month shelf life—shelf life is maintained by good storage habits, clean tools and distilled water dilution
- Do not freeze

### HEALTH AND SAFETY

Prior to use, refer to the product safety data sheet for proper handling and required personal protective equipment.



### USE INSTRUCTIONS

1. If required, dilute the coating. PM Coating 6040 is supplied ready to use. PM Coating 6040 EXP can be diluted up to 1:1 with clean water.
2. Thoroughly clean the surface being coated of dirt, oil, grease and other impurities.
3. Mix the coatings thoroughly to ensure uniform consistency.
4. The coatings can be applied by brush or sprayer. A sprayer is preferred for best results. The substrate may be heated to 200°C (392°F) for spray applications and to 50°C (122°F) for brush applications.
5. Apply the coating at a thickness of 50–125 microns (2–5 mil). Multiple thin layers are preferred to a single thick layer.
6. Allow the coating to dry completely between coats and before it is contacted by molten metal.
7. Clean all the application tools with water.

### SPRAY

1. Adjust the spray gun so it produces a uniformly atomized spray cone.
2. Spray at a distance of 15–20 cm (6–8 inches) from the surface and apply the coating in thin layers. Multiple thin layers are better than a single thick layer.
3. Ideal coating thickness is 125 microns (5 mil).

### BRUSH

Brush applications usually result in a thicker layer and rougher coating finish.

See Pyrotek document 999–Mixing and Application Guide for more information on mixing and applying coatings.

