



PYROCOTE CMT-G

ZIRCON REFRACTORY COATING FOR METALLIC TOOLS IN CONTACT WITH MOLTEN ALUMINIUM

Pyrocote CMT-G is a grey, thixotropic, water-based zircon graphite coating, formulated for use with molten aluminium. Its thixotropic properties make it easy to apply when shear forces are encountered, such as when the coating is stirred, brushed, sprayed, rolled or similarly applied. The presence of graphite reduces metal adherence and its non-wetting properties improve deskulling.

After a short time, undisturbed material in the container will revert to its original thixotropic gel properties. However, these properties also provide protection against cracking or spalling problems during rapid drying of thick applications.

This coating will not sediment and is tolerant of temperature variations during storage, but should be protected from hot and cold extremes. Continuous exposure to extreme temperatures is detrimental to the coating.

COMPOSITION

| Material | Weight |
|-----------------------------------|--------|
| ZrSiO ₄ | 55% |
| H ₂ O | 18% |
| Na ₂ O ₃ Si | 7% |
| Other | 20% |

USE INSTRUCTIONS

Pyrocote CMT-G should be applied undiluted by brush. Add 10 percent water to Pyrocote CMT-G for spray applications.

1. Brush out normally.¹
2. Spray gun application is satisfactory if the equipment is in good condition and the container includes an agitator. Simple blow guns, etc., may not be suitable. **NOTE: The product may be diluted with distilled water up to a maximum of 10 percent. Prepare only the coating amount being used at the time of application.** This will not affect suspension, but can reduce the thixotropic nature of the coating. Dilution with water is only advised for spray applications.²
3. Do not apply the coating to tools by dipping. The excessive thickness could cause spalling of the coating.
4. After application, Pyrocote CMT-G must be dried by heat application. Even a strong torching method will not blister, crack or spall the coating, and drying times are short because of the low intrinsic water content.³

¹ Pyrocote CMT-G should be applied with a brush to a substrate with a temperature of 60–80°C (140–176°F).

² Pyrocote CMT-G can be applied with a spray gun to a substrate with a maximum temperature of 250°C (482°F).

³ An optional top coating of Pyrocote MGM may be used to improve non-wetting performance and to decrease recoating frequency.

WARNING: Never contact wet coating with molten metal.

BENEFITS

- Improved green-bond strength
- Prolonged workability
- Optimized zircon amount allows for high performance
- Ready-for-use (with brush applications)
- Non-drip thixotropic system, yet flows easily
- Easily remixed or diluted
- Can be applied in thick layers without flaking or spalling

HEALTH AND SAFETY

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

