

Masterkure[®] 181 (formerly known as Cureseal F)

Pliolite[®] resin based multi-role curing, sealing and protective membrane for concrete

Description

Masterkure[®] 181 is a non-degrading, membrane-forming liquid based on Pliolite[®] resin suitable for spray application to freshly poured concrete. Masterkure[®] 181 is available as a clear opaque liquid and white solar reflective version. The resultant film retains sufficient moisture in the concrete to ensure full hydration of the cement; essential for optimum strength development. The cured concrete is typically harder and exhibits a dust free surface with a reduced incidence of drying shrinkage cracks. Additionally, the membrane acts as a primer system for many subsequent surface finishes that do not rely on penetration for substrate bond. When applied to floors, the Masterkure[®] 181 seals and dustproofs the surface, eliminating the primary source of abrasion and enhancing durability.

Typical applications

As a more effective and economical alternative to separate curing and priming/sealing regimes. Suitable for use on all concrete surfaces.

- Surfaces subject to finishing treatments.
- Economical enhancement of concrete flatwork.
- In high-rise construction to eliminate the requirement for water.

Advantages

- Eliminates the need for water.
- Imparts a harder dust free surface.
- Does not support the growth of bacteria.
- Non degrading, acts as a primer system.
- Minimal delay for overcoating etc.
- Abrasion resistant floors.
- High curing efficiency.
- Reduced labour costs.

- Reduces chloride penetration.

Packaging

Masterkure[®] 181 is available in 200, 25, 5 litres drums.

Typical properties*

Appearance:	Clear/Opaque liquid	
Specific gravity:	Clear	0.82 at 20°C
	White	0.89 at 20°C
Flashpoint:	30°C	
Finished film appearance:	Clear, tackfree, water repellent film	
Water Retention ASTM C156:	Pass	
Drying Time ASTM C309 Coverage	45 mins at 20°C	
	4.5 – 5.5 m ² / l	

*Properties listed are only for guidance and are not a guarantee of performance.

Standards

ASTM C309 Type 1 Class B
AASHTO M-148
ASTM-C-944 Abrasion Resistance

Directions for use

The compound should be spray applied as evenly as possible to the freshly placed concrete. For horizontal surfaces the Masterkure[®] 181 should be applied as soon as the initial surface sheen has disappeared from the concrete face. In the case of formed concrete, the product should be applied immediately on removal of the formwork.

Coverage

The recommended rate of application is 4.5 to 5.5m² per litre. This corresponds to that at which Masterkure[®] 181 has been tested, and at which it attains the claimed degree of curing

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efficiency. In favourable conditions such as shaded interior surfaces, adequate curing can be achieved with extended coverage rates. When using Masterkure[®] 181 for floor areas where maximum chemical and wear resistance is required, it is recommended that a further coat be applied after 24 hours.

Subsequent surface finishes

The Pliolite[®] resin in Masterkure[®] 181 ensures that bond is maintained with adhesives used for installing tiles, and other floor coverings. Masterkure[®] 181 will act as a primer for paint systems and will enable most surface treatments to progress with minimal delay.

Typical surface treatments that will bond to surfaces with Masterkure[®] 181 are:

- Water based emulsion paints containing PVA, PVC, acrylic co-polymers or Pliolite[®].
- Tile adhesives based on the above polymers.
- Bituminous emulsions and solutions.
- Thin section polymer modified cementitious systems.
- Polyurethane resin systems.
- Polysulphide systems.
- Epoxy resin compositions which do not rely on penetration for substrate bond.

For further information regarding compatibility of Masterkure[®] 181, contact BASF Construction Chemicals SA Technical Services Department.

Specification clause

Where indicated, concrete shall be cured by application of Masterkure[®] 181, curing compound based on Pliolite[®] resin manufactured by BASF Construction Chemicals SA or similar approved; to the following specification:

Specification type:	ASTM C309: Type 1 Class B
	AASHTO M-148

Masterkure[®] 181 is to be applied at a coverage rate of 4.5 to 5.5 m² per litre and strictly in accordance with the manufacturer's instructions.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.

Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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