

## Gi fZUW 'Ja dfcj Ya Ybh

- Masterkure 106
- Masterkure 107
- Masterkure 180 (Atrocure 2)
- Rheofinish 202
- Rheofinish 225 P (Atrorelease)

# MASTERKURE®

## 106

### Water based concrete curing compound

#### Description

MASTERKURE 106 is a solvent free, membrane forming wax emulsion, suitable for spray application to freshly poured concrete.

The resultant film retains sufficient moisture in the concrete to ensure full hydration of the cement; essential for optimum strength development. Membrane cured concrete is typically harder and exhibits a dust free surface with a reduced incidence of drying shrinkage cracks.

#### Primary uses

As a more effective and economical alternative to hessian and water and polythene curing regimes. Suitable for use on all concrete surfaces.

#### Advantages

- Eliminates the need for water.
- Single application.
- Promotes a harder dust free surface.
- Cured film is clear and water repellent.
- Reduces drying shrinkage.
- High curing efficiency.
- Reduced labour costs.
- Water based.

#### Packaging

MASTERKURE 106 is available in 210 litre drums.

#### Typical properties\*

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

Appearance:	White liquid
Specific gravity:	1.00
Flashpoint:	Not applicable
Finished film appearance:	Clear, tack free, water repellent film
Water retention ASTM C156:	Pass
Drying time ASTM C309:	Less than 4 hours

#### Standards

ASTM C309 Type 1 Class A  
AASHTO M-148 Type 1 Class A

#### Directions for use

The compound should be spray applied as evenly as possible on to the freshly placed concrete.

For horizontal surfaces MASTERKURE 106 should be applied as soon as the initial surface sheen has disappeared from the concrete surface. In the case of formed concrete, the MASTERKURE 106 should be applied immediately on removal of the formwork. To assist breakdown of the MASTERKURE 106 film on vertical and formed surfaces, it is essential to dampen down the concrete with clean water prior to application.

### Coverage

The recommended rate of application is 5-6 square metres per litre. This corresponds to that at which MASTERKURE 106 has been tested, and at which it attains the claimed degree of curing efficiency. In favourable conditions such as shaded interior surfaces, adequate curing can be achieved with extended coverage rates.

### Film breakdown

The time for deterioration of the membrane is dependent on a number of variables, which include film thickness, degree of exposure to weathering, traffic UV light, and the porosity of the substrate concrete.

### Subsequent surface finishes

It is important that the complete removal of the MASTERKURE 106 should be ensured prior to the application of any surface finish or additional treatment. It is recommended that where the concrete is to receive a coating or the application of tiles, the use of MASTERKURE 181 is considered.

MASTERKURE 181 is a resin based non-degrading curing membrane meeting the requirements of ASTM C-309 Type 1 Class B. It is additionally formulated to act as a primer for many finishes or to seal concrete surfaces and provide a degree of abrasion to flatwork.

### Specification clause

## MASTERKURE 106

Where indicated, concrete shall be cured by application of MASTERKURE 106, membrane forming wax emulsion manufactured by

Degussa or similar approved; to the following specification:

Specification type:

ASTM C309: Type 1 Class A

AASHTO M-148

MASTERKURE 106 is to be applied at a coverage rate of 5 to 6 square metres per litre and strictly in accordance with the manufacturer's instructions.

### Storage

Shelf life is up to 6 months when stored under cover, out of direct sunlight and protected from extremes of temperature.

### Health and safety

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

### Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Degussa representative.

Degussa reserves the right to have the true cause of any difficulty determined by accepted test methods.

### Quality

All products produced by Degussa certified manufacturing facilities, are produced to conform to systems designed to meet internationally recognised quality standards.

02/2006 Degussa-IR

# MASTERKURE® 107

Water based concrete curing compound, white pigmented for solar reflectance

## Description

MASTERKURE 107 incorporates a white pigment which at recommended coverage rates gives a daylight reflectance value of 60-80%. This permits a high curing efficiency to be maintained even in conditions of intense ambient light.

MASTERKURE 107 is a solvent free, membrane forming wax emulsion, suitable for spray application to freshly poured concrete.

The resultant film retains sufficient moisture in the concrete to ensure full hydration of the cement; essential for optimum strength development. Membrane cured concrete is typically harder and exhibits a dust free surface with a reduced incidence of drying shrinkage cracks.

## Primary uses

As a more effective and economical alternative to hessian and water and polythene curing regimes. Suitable for use on all concrete surfaces.

## Advantages

- Eliminates the need for water
- Single application
- Promotes a harder dust free surface

- Cured film is clear and water repellent
- Reduces drying shrinkage
- High curing efficiency
- Reduced labour costs
- Water based
- Solar reflective

## Packaging

MASTERKURE 107 is available in 210 litre drums.

## Typical properties\*

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

Appearance	White liquid
Specific gravity	0.954
Flashpoint	Not applicable
Finished film appearance	white solar reflective, tack free, water repellent
Water retention (ASTM C309):	Pass
Drying time (ASTM C309):	Pass → 3 hours

## Standards

ASTM C309 Type 2 Class A

## Directions for use

The compound should be spray applied as evenly as possible to the freshly placed concrete.

For horizontal surfaces the MASTERKURE 107 should be applied as soon as the initial surface sheen has disappeared from the concrete face. In the case of formed concrete, the MASTERKURE 107 should be applied immediately on removal of the formwork. To assist breakdown of the MASTERKURE 107 film on the vertical and formed surfaces, it is

essential to dampen down the concrete with clean water prior to application.

### Coverage

The recommended rate of application is 5-6 square metres per litre. This corresponds to that which MASTERKURE 107 has been tested, and at which it attains the claimed degree of curing efficiency. In favourable conditions such as shaded interior surfaces, adequate curing can be achieved with extended coverage rates.

### Film breakdown

The time for deterioration of the membrane is dependent on a number of variables, which include film thickness, degree of exposure to weathering, traffic, UV light, and the porosity of the substrate concrete.

### Subsequent surface finishes

It is important that the complete removal of the MASTERKURE 107 should be ensured prior to the application of any surface finish or additional treatment. It is recommended that where the concrete is to receive a coating or the application of tiles, the use of MASTERKURE 181 is considered.

MASTERKURE 181 is a resin based non-degrading curing membrane meeting the requirements of ASTM C-309 Type 1 Class B. It is additionally formulated to act as a primer for many finishes or to seal concrete surfaces and provide a degree of abrasion to flatwork.

### Storage

Shelf life is upto 6 months when stored under cover, out of direct sunlight and protected from extremes of temperature.

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

### Health and safety

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

### Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Degussa representative.

Degussa reserves the right to have the true cause of any difficulty determined by accepted test methods.

### Quality

All products produced by Degussa certified manufacturing facilities, are produced to conform to systems designed to meet internationally recognised quality standards.

09/2005 Degussa-IR

# MASTERKURE®

## 180

(Formerly Atrocure 2)

Resin based curing and protective membrane for concrete

### Description

MASTERKURE 180 is solvent based, fast drying, film forming agent, which is used as curing compound to retain sufficient moisture in the concrete to ensure full hydration of the cement.

### Packaging

MASTERKURE 180 is available in 210 litres drums.

### Typical properties\*

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

Standards	ASTM C 309 Type 1
Appearance	Light brown liquid
Specific gravity	0.79 – 0.81 gm/cm <sup>3</sup>
Working temperature	Upto 70°C
Flashpoint	80°C

### Applications

MASTERKURE 180 should be sprayed onto fresh concrete surface before drying. The ideal time of application is when the concrete surface does not shine anymore (Max. 20 minutes after concreting process).

The coating can be done by spraying a thin layer of MASTERKURE 180 on surfaces exposed to atmospheric conditions. In case of very drying of concrete surfaces, wet it with water thoroughly before applying MASTERKURE 180.

### Coverage

One litre of MASTERKURE 180 covers 4-5m<sup>2</sup>, which forms a thin coat on concrete (5-10mic). This film will disappear after 3-4 weeks automatically in atmospheric conditions.

### Safety and health

As MASTERKURE 180 contains chemical solvents, it is a flammable material and special care should be taken during use and storage. Avoid any contact with eyes, mouth, skin and foodstuffs. Use in well ventilated areas and avoid direct and close inhalation.

### Storage

Store under cover out of direct sunlight and protect from extremes of temperature. Shelf life is one year.

### Quality

All products produced by Degussa certified manufacturing facilities, are produced to conform to systems designed to meet internationally recognised quality standards.

04/2005 Degussa-IR

# RHEOFINISH®

## 202

### Solvent based chemical release agent

#### Description

Chemical release agent suitable for mould and shutter faces prior to casting concrete in order to achieve a clean release. After removal of the formwork, the resultant concrete has a smooth hard uniform finish, with reduced incidence of blow holes. RHEOFINISH 202 can be applied to the formwork by spray in the form of a light uniform mist coating.

#### Primary uses

RHEOFINISH 202 is formulated for application to plywood, timber, steel and plastic faced formwork and moulds, prior to casting concrete, to ensure a clean release.

#### Action

RHEOFINISH 202 reacts chemically with cement to impart excellent release properties to treated surfaces. Concrete cast against surfaces coated with RHEOFINISH 202 exhibit a smooth, hard, uniform finish.

RHEOFINISH 202 has no negative effect on the properties of concrete nor will it impair the adhesion of subsequent surface treatments when applied at the recommended coverage rates.

#### Packaging

210 litre drums. Bulk deliveries available upon request.

#### Composition

Low viscosity hydrocarbon carrier, blended with a chemically active release agent.

#### Typical properties\*

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

Colour:	amber
Specific gravity:	0.85 at 25°C
Chloride content:	nil
Freezing point:	-10°C
Flashpoint:	66°C

#### Standards

Water Research Council approved for use with potable water.

#### Directions for use

Apply before the first casting and thereafter re-apply immediately after stripping and cleaning the mould.

Lightweight horticultural sprayers are ideal as RHEOFINISH 202 is finely atomised to give a uniform coating. Excessive application should be avoided.



Alternatively, application may be made by a fine haired brush, only a very thin coating should be made and any excess removed.

If after the first application, the RHEOFINISH 202 is completely absorbed into new timber or plywood, a further application should be made before filling the moulds or formwork.

### Coverage

The coverage rate for RHEOFINISH 202 is 30 to 70m<sup>2</sup>/litre when spray applied depending on smoothness and porosity of the formwork used.

#### Note:

Progressively better results are obtained on plywood and timber moulds as they become impregnated and the operatives become accustomed to working with the release agent. RHEOFINISH 202 in general, may be used over timber moulds. etc., which have been treated with other mould oils, providing excess has been removed.

### Equipment care

RHEOFINISH 202 may usually be left in spray guns or sprayers without detriment, but with certain types, there may be some softening of rubber seals with prolonged contact.

### Storage

Store under cover, out of direct sunlight and protect from extremes of temperature. Storage life up to 1 year when stored in unopened containers as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Degussa'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 Degussa representative.

Degussa reserves the right to have the true cause of any difficulty determined by accepted test methods.

### Quality

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06/2005 Degussa-IR



## RHEOFINISH®

## 225 P

(Replaces Atrorelease)

Water dispersible chemical release agent

## Description

A ready to use water dispersible, safe, effective release agent which is friendly to the environment. RHEOFINISH 225 P is applied to mould and shutter faces prior to casting concrete in order to achieve a clean release. After removal of the formwork, the resultant concrete has a smooth, hard, uniform finish, with reduced incidence of blow holes. RHEOFINISH 225 P can be diluted 1 to 1 by water and applied to the formwork by spray in the form of a light uniform mist coating.

## Primary uses

RHEOFINISH 225 P is formulated for application to plywood, timber, steel and plastic faced formwork and moulds, prior to casting concrete, to ensure a clean release.

## Packaging

RHEOFINISH 225 P is available in 20 and 210 litre drums. Bulk deliveries available upon request.

## Typical properties\*

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

Colour	Amber
SG finished product	0.85 –0.87 at 25°C
Chloride content:	Nil

## Composition

A chemically active release agent blended with water.

## Directions for use

Apply before the first casting and thereafter re-apply immediately after stripping and cleaning the mould.

Lightweight horticultural sprayers are ideal as RHEOFINISH 225 P is finely atomised to give a uniform coating. Excessive application should be avoided.

Alternatively, application may be made by a fine haired brush, only a very thin coating should be made and any excess removed.

If after the first application, the RHEOFINISH 225 P is completely absorbed into new timber or plywood, a further application should be made before filling the moulds or formwork.

## Action

RHEOFINISH 225 P reacts chemically with cement to impart excellent release properties to treated surfaces. Concrete cast against surfaces coated with RHEOFINISH 225 P exhibit a smooth, hard, uniform finish.

RHEOFINISH 225 P has no negative effect on the properties of concrete nor will it impair the adhesion of subsequent surface treatments when applied at the recommended coverage rates.

### Coverage

The coverage rate for RHEOFINISH 225 P is between 30 to 40m<sup>2</sup>/litre when spray applied depending on smoothness and porosity of the formwork used. Coverage is considerably enhanced on marine ply and steel faced forms.

#### Note:

Progressively better results are obtained on plywood and timber moulds as they become impregnated and the operatives become accustomed to working with the release agent. RHEOFINISH 225 P in general, may be used over timber moulds etc., which have been treated with other mould oils, providing excess has been removed.

### Equipment care

RHEOFINISH 225 P may usually be left in spray guns or sprayers without detriment, but with certain types, there may be some softening of rubber seals with prolonged contact.

### Storage

Store under cover, out of direct sunlight and protect from extremes of temperature. Storage life up to 1 year when stored in unopened containers as above. The product must be stirred before being used.

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

### Safety precautions

As with all chemical products care should be taken during use and storage to avoid contact with eyes and mouth. 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 Degussa representative. Degussa reserves the right to have the true cause of any difficulty determined by accepted test methods.

### Quality

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