

# MasterFinish RL 211

Special water-based, biodegradable, form release agent for concrete.

## MATERIAL DESCRIPTION

MasterFinish RL 211 is a special ready to use water-based form release agent for concrete applications, meeting UNI 8866 specifications for form release agents. MasterFinish RL 211 offers a safe (biodegradable, non toxic, non irritant), cost effective alternative to traditional oil based release agents.

This unique product, when applied to most forms and form liners, enhances the appearance of precast, prestressed and poured-in-place concrete, reducing or eliminating surface voids caused by entrapped air and water (bug holes).

MasterFinish RL 211 significantly reduces production cost through its efficiency, ease of use, and its superb release capability.



ASSIAD CLASSIFICATION OF FORM RELEASE AGENT		
FLAMMABILITY		**
UTILIZATION	HYGIENE	***
	COV	***
	BIODEGRADABILITY	***
* FAVORABLE CRITERION		* UNFAVORABLE CRITERION

## FEATURES AND BENEFITS

- Enhances the surface appearance of concrete structures.
- Ready to use, it can be easily spread or applied with a brush or a roller.
- Produces unstained formed concrete surfaces, including these incorporating white cement.
- Minimises or eliminates surface voids caused by entrapped air and water (bug holes).
- Extremely efficient release mechanism permits match casting of intricate detail.
- It can be used with all types of concrete, precast or cast in place.
- Can be applied on all the most common types of concrete forms such as wood, metal, polyester or plywood.
- Significantly reduces form cleaning and extends form life.

- Applicable in one layer, ensuring a uniform and homogeneous distribution on the surface to be treated, reducing application time-costs.
- Normal or delayed stripping are allowed.

## DOSAGE

The recommended coverage rate for MasterFinish RL 211 form release agent depends the application technique, and on form liner's texture and its absorptive. When sprayed and uniformly distributed, at a constant pressure of 6 atm, on metallic or on smooth, non-absorptive surfaces, the coverage rate ranges from 70 to 90 m<sup>2</sup> liters. When applied by brush or roller the coverage rate ranges from 30 to 50 m<sup>2</sup> liters.

## PACKAGING

MasterFinish RL 211 form release agent is supplied in 10L cans, 208L drums and 1.000L tanks.

## STORAGE

The performance of MasterFinish RL 211 form release agent will be significantly impaired if the material is exposed to intense heat or freezing. Store at temperatures above 5°C and below 40°C in dosed containers. Do not store in direct sunlight. If stored properly the shelf life of MasterFinish RL 211 is 9 months.

## DIRECTIONS FOR USE

MasterFinish RL 211 form release agent is specifically developed to work at the form surface and cement paste interface. The performance of this product will be significantly hindered by oil contaminants and cement paste build-up. Forms, having residue such as this, can be wire brushed and wiped with solvent and, then, a dry rag. Once thoroughly cleaned, forms will be maintained in this condition through the use of MasterFinish RL 211 and will also produce more visually appealing products as a result. MasterFinish RL 211 form release agent is compatible with most forms and form liners with the exception of those made of styrene or latex.

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## SAFETY ISSUE

- Easily biodegradable, non irritant, non flammable and non combustible, non subjected to regulation prescribed for mineral oil based form release agents.
- Virtually odour free; emits no harmful vapours.
- Produces up to 80% lower formation of aerosols than traditional oil-based release agents.

- Significantly reduces the risk of dermatitis.

Technical Information	
Form	White emulsion
Relative density (g/ml at 20°C)	0.940 – 0.980

## APPLICATION

- When spraying MasterFinish RL 211 form release agent, hold the spray tip a distance of 40 to 50 cm from the form surface being treated to achieve proper coverage
- A spray device with the air pressure capacity of approx. 6 atm and a spray tip with an orifice size of 0,65 mm delivering an oval spray pattern have been found to produce the best results.
- It is important that the appearance of the form during application should only be "speckled" as opposed to "wetted". The "white specks" will then flow together to form a very light, uniform film. This process will take between 3 and 10 minutes, depending on ambient and form temperatures and relative humidity. This results in a clear water-repellent film which is not easily removed by rainfall or concrete placement.
- When a central spraying equipment is used care has to be taken in order to completely clean the pipes from the previously used form release agent.
- The spray gun should not be left unused for several days, as this may lead to tip blockage, to avoid this immerse the tip in a bucket of water at the end of the day.
- MasterFinish RL 211 form, release agent may also be wiped, mopped, rolled, or brush applied. However, the potential for over-application is greater when using these methods, therefore the excessive material should be always removed. Over application can result in surface dusting or surface tearing.

- MasterFinish RL 211 is an emulsion and to obtain full releasing effect it is essential to have a stable and homogeneous product.
- If the product should freeze after application onto the moulds, it will still provide a satisfactory releasing effect.

## COMPATIBILITY

MasterFinish RL 211 should never be mixed with other form release agents. When used as a demoulding agent on particular forms made of rubber or other resinous materials, it is recommended to perform a test application and to contact our Technical Service Department.

## SAFETY INSTRUCTION

For high pressure spraying application the use of protective means (like gloves, glasses and mask) is very recommended.

If applied on steel forms at low temperatures (lower than 10°C) it is advisable to wait at least 30 minutes prior to cast concrete. MasterFinish RL 211 form release agent is compatible with the full line of Master Builders Solution admixtures to fill all application needs.

## OTHER SERVICES

For price analysis, specifications, supplementary brochures, references, reports and technical assistance, visit the website [www.master-builders-solutions.com/it-it](http://www.master-builders-solutions.com/it-it) or contact [infomac@mbcc-group.com](mailto:infomac@mbcc-group.com).

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Scan the QR code to visit the product page and download the latest version of this datasheet.



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Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

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This version supersedes all the previous ones.