

MasterSeal M 391

Two-component acid-resistant epoxy coating of the MasterSeal 6391 system, certified for food contact.

MATERIAL DESCRIPTION

MasterSeal M 391 is a two-component epoxy coating with a glossy finish (formulated for contact with food in accordance with Commission Regulation EU No. 10/2011 of 14/1/2011) and constitutes the membrane of the MasterSeal 6391 system.

MasterSeal M 391 is available in the colors:

- yellow, specific for contact with wine;
- white (and light blue) specific for contact with drinking water, oil, cereals, and other food substances.

FIELDS OF APPLICATION

MasterSeal M 391 is mainly indicated for the protection of wine vessels, tanks for containing oil, drinking water and for all foods provided for by EU Regulation no. 10/2011 of the Commission of 14/1/2011. Given its high chemical resistance compared to a large variety of aggressive chemicals, it is also suitable for the protection of industrial tanks

FEATURES AND BENEFITS

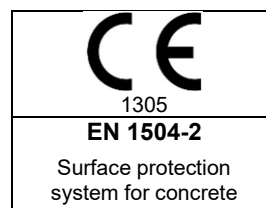
MasterSeal M 391 has the following peculiar characteristics;

- formulated according to the "positive list" provided for by EU Regulation no. 10/2011;
- complies with the acceptance limits provided for by Ministerial Decree 21/3/1973 and subsequent amendments and certificate for migration tests with simulants of type A, B, C, D1, 3, D2 provided for by EU Regulation no. Commission of 14/1/2011.

- complies with the limits and restrictions set by EC Regulation No. 1895/2005 relating to the restriction of the use of some epoxy derivatives intended to come into contact with food (prohibition of "BFDGE" and "NOGE" and compliance with specific migration of the "BADGE");
- certified according to Ministerial Decree 174 6/4/2004 (Regulation concerning materials and objects that can be used in fixed systems for the collection, treatment, adduction and distribution of water intended for human consumption);
- complies with the principles defined in UNI EN 1504/2 ("Concrete surface protection systems") and the relative acceptance limits;
- not solvent based.

For the technical characteristics, refer to the performance of the entire MasterSeal 6391 system.

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking according to UNI EN 1504-2 and the relative DoP (Declaration of Performance).



MasterSeal M 391 color		
Ethanol 10%	A	Yellow
Acetic acid 3%	B	Yellow
Ethanol 20%	C	Yellow
Ethanol 50% (up to 96)	D1	Yellow
2,6 diphenyl-p-tenylene polyoxide (dry food substances)	E	Light blue and white
Vegetable oil	D2	Light blue and white
Drinking water	--	Light blue and white

COVERAGE

Product	Function	kg/m ²
MasterSeal M 391	initials vitrifying	0,6

MasterSeal M 391

Two-component acid-resistant epoxy coating of the MasterSeal 6391 system, certified for food contact.

PACKAGING

Product	Component	Packaging	Kg
MasterSeal M 391 Yellow	A yellow	Tin	25
	B	Tin	25
	2A+B	2 Milk of A + 1	75
Product	Component	Packaging	Kg
MasterSeal M 391 blue	A blue	Tin	16
	B	Tin	4.2
	A+B	2 Milk of A + 1	20.2
Product	Component	Packaging	Kg
MasterSeal M 391 White	A white2	Tin	16
	B	Tin	4.2
	A+B	2 Milk of A + 1	20.2

STORAGE

Store the product in a sheltered, dry place at a temperature anywhere between +5°C and +30°C.

Essential characteristic MasterSeal M 391 Yellow	
Density, kg / liter	A: 1,50; B: 1,50 A+B: 1,50
Solids by volume	100%
Pot life	20 minutes a + 20°C
Touch drying	20°C: 4 – 8 h
Deep drying	20°C: 12 – 48 h
Operating temperature, air	- 20° C – +80°C
Kinematic viscosity at 23°C mPa · s	A: c.a 13000 B: c.a 8000 A+B: c.a 11000
Mixing ratios by weight and by volume	2 A / 1 B
Full garment	7 days (a + 20°C)
Cleaning tools	Thinner for epoxies
Essential characteristic MasterSeal M 391 White e blue	
Density, kg / liter	A: 1,50; B: 1,00 A+B: 1,38 ± 0,02
Deep drying	20°C: 24 - 36 ore
Solids by volume	100%

Essential characteristic MasterSeal M 391 White e blue	
Kinematic viscosity at 23°C mPa·s	A: c.a 4000 B: c.a 250 A+B: c.a 3000
Recoating time	20°C: 24 - 48 ore
Operating temperature air	- 20° C – +80°C
Full garment	7 days (a + 20°C)
Pot life	60 minutes a 20°C
Mixing ratios	79 % A / 21 % B in weight
Touch drying	20°C: 6 - 8 h
Cleaning tools	Thinner for epoxies

APPLICATION SHEET

For every application detail (preparation of the substrate, primer and other parameters) refer to the technical data sheet of the MasterSeal 6391 system and to the MasterSeal systems application manual for white and black water management.

TEMPERATURE

The application can take place when the ambient temperature is between + 5°C and + 40°C and always higher than 3°C with respect to the dew point.

APPLICATION MasterSeal M 391 Yellow

Mix the two components before use with a whisk drill. The product has a limited life in an open vessel and a high viscosity at low temperatures.

For these reasons it can be applied by roller only for small surfaces and therefore for small quantities, taking care to mix only part of the package and bring it to a temperature of at least 35°C. Dilution is allowed only with food-grade alcohol.

It can be applied by spray but only by airless equipped with bi-mixer type WIWA Duomix Series 230, WIWA FlexiMix II, Graco XM 70 or equivalent.

Application in a single coat is always recommended, for a consumption of 0.6 kg / m².

Always check that the surface humidity of MasterSeal P 385 is less than or equal to 4% before being overvented.

MasterSeal M 391

Two-component acid-resistant epoxy coating of the MasterSeal 6391 system, certified for food contact.

MasterSeal P 385	Time	Umidity	Recoating	
Comp. D + water	24 h	< 6 %	MasterSeal P 385 (ABC)	☺
Kit "ABC"	48 h	< 4 %	MasterSeal M 391	☺
Kit "AB2D"	24 h	< 3 %	MasterSeal M 391	☺

APPLICATION MasterSeal M 391 Light blue and White

Mix the two components before use with a whisk drill. The product can be applied by roller or airless spray. Dilution is allowed only with food-grade alcohol.

It is always recommended to apply in two coats, for a total consumption of 0.6 kg / m², respecting the recoating times. It is advisable to prepare from time to time a quantity of product not exceeding that which can be applied during its useful life.

High temperatures accelerate hardening and reduce the use time of the prepared material.

Airless spray instrument	
Nozzle	0.015/50-0.021 or 0,023/40
Pressure at the nozzle	200 – 300 bar
Compression ratio	60 / 1

CLEANING THE COVERED SURFACE BEFORE SERVICE

Before putting the tank into operation, it is recommended to wait respectively (at 23°C) for at least two weeks. In any case, check whether the Shore D hardness has in any case reached the final value.

Before filling the tanks with food, it is essential to wash them with a 10% aqueous solution of soda to disinfect the surfaces and remove any salts present. We then proceed with an abundant rinse with hot water. This procedure can cause a slight loss of gloss of the film which, however, does not change its technical characteristics.

During the service life of the tank and in correspondence with the service stops for periodic cleaning operations, chromatically non-homogeneous areas may appear on the surface of the vitrified tank (for example localized purple streaks). It is a purely aesthetic phenomenon which

does not in any way modify the general performance of the glazing agent.

SANITIZATION OF TANKS FOR DRINKING WATER

Use a 1% sodium hypochlorite (bleach) solution in water. Leave on for at least 30 minutes and maximum 60 minutes, then wash thoroughly with tap water.

In case of heavily soiled surfaces, this process can be repeated a second time or higher concentrations of sodium hypochlorite (maximum 5%) can be used.

SAFETY INSTRUCTION

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

OTHER SERVICES

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

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



MasterSeal M 391

Two-component acid-resistant epoxy coating of the MasterSeal 6391 system, certified for food contact.

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.

Master Builders Solutions Italia Spa

Via Vicinale delle Corti, 21 – 31100 Treviso – Italia
T +39 0422 429200 F +39 0422 421802
www.master-builders-solutions.com/it-it
e-mail: infomac@mbcc-group.com

For further information, please consult the local Technician of Master Builders Solutions. The technical advice on how to use our products, either written or verbally given, are based on the current state of our scientific and practical expertise, and does not imply the assumption of any guarantee and/or responsibility for the final results of works executed using our products.

Therefore, the customer is not exempted from the exclusive task and responsibility of verifying the suitability of our products for the intended use and purposes.

This version supersedes all the previous ones.