



Renner Italia S.p.A.
Via Ronchi inferiore, 34
40061 MINERBIO (BO)

YL---M648/--XXX

1-2K Water-based Basecoat, white

Main properties:

• Suitable for any kind of wood and MDF	• High build and insulating properties
• Can be sanded with automatic sanding machine	•

Versions:

M648/--C02	White
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Recommended use:	• General purpose	• MDF	• Turned parts
Application method:	Spray (conventional, airless, airmix). Electrostatic guns can be used if suitable for water-based products.		
Product preparation:	Ready to use as one-pack. Cross-link with YC M406 from 2 to 4%. 2K: YC M401 from 2% to 5% o, as alternative, YC M404 from 2% to 5%		

Chemical-physical characteristics (23 °C)

	C02
Solid content (%)	50 ± 2
Specific weight (g/cm³)	1,25 ± 0,05
Viscosity Brookfield (s) 23°C	11000 ± 2000
pH	7 - 9

Application properties

Vertical application (wet µm)	200
Recommended N° of coats	1 - 3
Recommended quantity per coat (g/m²)	min: 150 max: 250
Interval between coats	2 h
Spreading rate (m²/litre)	6 - 10

General remarks on the coating system

Drying at 20°C e RH% between 45 and 65: 160 g/m²		Forced drying: 160 g/m²		
Dust free	30 minutes		Temperature	Time
Touch free	60 minutes	Flash Off	30 °C	10 minutes
Overcoating	4 h	Laminar air	45 °C	45 minutes
Stackable	4 h	Cooling	25 °C	5 minutes
Sandable	8 h	Stackable and overcoating		60 minutes
		Sandable		2 h

Substrate preparation: Clean the surface well, removing all traces of oil, wax and resins. To minimize the fibre swelling of MDF, sharp the working tools well and sand or brush the surface with 220 – 240 grit paper.

Wood species: Some wood essences, such as oak, acacia, ash, etc., release some coloured water-soluble substances which may stain the white basecoat as well as the water-based topcoat even if several coats are applied. Such wood essences can be lacquered with at least 2 coats of basecoats only if YL M648/ C02 has been catalysed with YC M401 at 5%. The basecoat can be used as one pack if the lacquered topcoat is PU or if the wood is free from water-soluble substances.

Application instructions: do not apply high quantities of product in a single coat and avoid wet-on-wet coating systems. To obtain the best result, do not thin the product with water, but choose the best application conditions allowing the maximum product atomisation. For example, for spray application:

	Thinning %	Nozzle	Air pressure	Coating pressure
Conventional gun	4 - 6	2- 2,2	3 - 4	--
Airmix		11	0 - 2	80 - 110
Airless		11	--	120 - 150

The use of pre atomizers and pre heaters (with temperatures between 30 and 40 °C) ensures better application consistency all year round. When application is carried out at low temperatures and / or high relative humidity, or when a third coat is applied, the drying time gets longer. Drying should be carried out in areas with good air ventilation (the whole volume of air of the drying room should be changed every 15-20 minutes.)

Sanding: The use of spaced and stearate 280-400 grit paper is recommended. The product can be sanded both with manual and automatic sanding equipment. The automatic systems must be set up in order not to overheat the coating films.

Overcoating: This product can be overcoated both with water-based topcoats for interior and with solvent-based PU topcoats.

Overcoating with Redox polyester coatings is not recommended.

For further information regarding the use of water-based products, please refer to our Main Guide.

General remarks

- Mix well before use.
- If properly stored at temperatures between 5 and 35°C, the shelf life is 18 months.
- On application, the temperature of the product, the substrate and the working environment should never fall below 15°C. Coatings applied at lower temperatures will show chemical and mechanical properties lower than standard performances that can be normally achieved.
- Coating leftovers (washing waters, waters from spray booths, used coatings) must be disposed of according to local regulations. Never dispose of residues directly into drains.
- Application tools must be cleaned with water after use. When dry films must be removed, special detergent **AY---M460** should be used, letting it work overnight and then cleansing it with water.

What to do to...	Add	% of use	
		%	Grams per 25 litres
Increase thixotropy or viscosity	AY M453	0,5 - 1	125 - 250
Eliminate craters/cissings	AY M457	0,2 – 0,5	50 - 125