



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

# YL-M643/--XXX

MONO-BI COMPONENT WHITE WB BASECOAT

**Main Properties:**

<ul style="list-style-type: none"> <li>Suitable for all kind of wood as well as M.D.F.</li> <li>Long pot-life after catalysis</li> </ul>	<ul style="list-style-type: none"> <li>Elevate insulating and covering power</li> <li>Sandable with automatic sanding machine</li> </ul>
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**Versions:**

M643/--C02	white
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<b>Recommended use:</b>	<ul style="list-style-type: none"> <li>General purpose</li> <li>M.D.F. substrates</li> <li>Turned parts</li> </ul>
<b>Application method:</b>	Spray (conventional, airless, air mix). Electrostatic guns may be used provided they are suitable for waterborne products.
<b>Blending instructions:</b>	Catalyze with YC---M401 or YC M402 at 4-8%. Once catalised, the product has a pot life of 3 hours. Ready to use if one component.

**Chemical-physical characteristics (23 °C)**

	<b>C02</b>
Solid contents (%)	50 ± 2
Specific gravity (g/cm <sup>3</sup> )	1,25 ± 0,05
Viscosity DIN 6 (s) 23°	50 ± 10
pH	tra 7 e 9

**Application properties**

Vertical application (wet µm)	200
Recommended N° of coats	from 1 to 3 coats
Recommended application weight (g/m <sup>2</sup> )	min: 150 max: 250
Interval between coats	2 hours
Spreading rate (m <sup>2</sup> /litre)	6 - 10

**General coating system recommendations**

<b>Drying at 20°C and 45 – 65 RU%: 160 g/m<sup>2</sup></b>		<b>Forced drying: 160 g/m<sup>2</sup></b>	
Dust free	30 minutes	Temperature	Time
Handling	60 minutes	Flash Off	30 °C / 10 minutes
Over coating	4 hours	Laminar air	45 °C / 45 minutes
Stackable	4 hours	Cooling	25 °C / 5 minutes
Sanding time	2 hours	Stackable or overcoating	60 minutes
		Sanding time	2 h

**Substrate preparation:** Substrate must be carefully cleaned, removing all traces of grease, wax or resins. To minimize fibre rising the milling tools have to be well sharp-edged and, if possible, the substrate shall be sanded with 220 – 240 grit paper.

**Wood species:** Some wood essences like oak, acacia, ash, etc...release some coloured water soluble substances which may stain the white basecoat as well as the waterbased topcoat even if several coats are applied. Such wood essences can be lacquered with at least 2 coats of basecoats only if YL M643/ C02 has been catalysed with hardener YC M401 at 5%. The basecoat may be used as mono component if the lacquered topcoat is PU based or if the wood is free from water soluble substances

**Application instructions:** Avoid to apply excessive quantity of product in a single coat and wet on wet coating systems. To obtain the best result, it is recommended to avoid to dilute the product with water but to choose the best application conditions that shall allow the maximum product atomisation. Hereunder are listed the general advices suggested for spray application:

	Thinning %	Nozzle	Air pressure	Coating pressure
Conventional spray gun	4 - 6	from 2 to 2,2	From 3 to 4	--
Air mix	--	11	From 0 to 2	From 80 to 110
Airless	--	11	--	From 120 to 150

The use of pre atomizers and pre heaters (with temperatures between 30 and 40 °C) ensure better application consistency all year round. When application is carried out at low temperatures and / or high relative humidity, or when the third coat is applied 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 by manual or automatic sanding equipment. The automatic systems have to be set up in order to avoid to overheat the film of coatings.

**Overcoating:** Can be over coated both with waterborne topcoats for interior and with solvent based PU topcoats.

Overcoating with Redox polyester coatings is not recommended.

For further information regarding the use of waterborne products, please refer to the Main Guide

**General remarks**

- Mix well before use.
- If properly stored at temperatures between 5 and 35°C, shelf life is 18 months
- On application the temperature of the product, the substrate, the coating 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 left overs (washing waters, waters from spray booths, used coatings) must be disposed of according to local regulations. Never dispose residues directly into drains.
- Application tools must be cleaned with water after use. When dry films must be removed, AY---M460, special detergent should be used, letting it work overnight and then cleansing with water

What to do in order to...	Add	% of use	
		%	Grams for 25 litri
Increase thixotropy or viscosity	AY M453	0,5 - 1	da 125 a 250

Eliminate craters / cissings	AY M457	0,2 – 0,5	da 50 a 125
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