

Rethane VBR 649 uses specially selected raw materials, showing high chemical and weathering resistance. It is a glossy varnish of high durability with excellent gloss retention .

#### TECHNICAL CHARACTERISTICS

##### TYPE

Aliphatic polyurethane varnish, two pack system.

##### USAGE

Recommended as a coating for substrates in wood or concrete, and wood deck small boats, exposed concrete floors and concrete.

#### TECHNICAL INFORMATION

<b>COLOR</b>	Colorless		
<b>FINISH</b>	Glossy		
<b>VOLUME SOLIDS</b>	42 % ± 2	According to ISO 3233	
<b>WEIGHT PER LITER</b>	1,030 ± 0,05 g/ml	According to ASTM D 1475	
<b>FLASH POINT</b>	32°C		
<b>MIXING RATIO</b>		Weight	Volume
	<b>Comp. A</b>	100,0	4,0
	<b>Comp. B</b>	26,0	1,0
<b>POT LIFE (25°C)</b>	4 h		
<b>INDUCTION TIME</b>	15 to 30 min		
<b>THEORETICAL SPREADING RATE</b>	21,0 m <sup>2</sup> /l - 20 µm		
<b>WET THICKNESS</b>	48 µm		
<b>DRY THICKNESS</b>	20 µm		

#### DRYING TIME, for 20 µm

25°C

Minimum Maximum

<b>Touch</b>	1 h
<b>Handle</b>	3 h
<b>Recoat</b>	6 h 48 h

<b>ENVIRONMENTAL CONDITIONS</b>	<b>Temperature</b>	Should be between 0 to 40°C.
	<b>Relative Humidity</b>	Between 30 to 85%
	<b>Dew Point</b>	Surface temperature is at least 3°C above dew point
	<b>Thinner</b>	440.0000

<b>APPLICATION</b>	<b>Brush</b>	It is not necessary dilution.
	<b>Roller</b>	Dilute up to 10% (vol.) with recommended thinner. Must be used solvent resistant roller (sheep wool). The wool must be cutted (small size) to avoid blistering during the application.
	<b>Conventional Spray Gun</b>	Dilute up to 10% (vol.) with recommended thinner. Conventional DeVilbiss JGA 503 FX 704 spray gun or similar. Spray pressure between 2,5 to 3,0 kgf/cm <sup>2</sup> (35 to 43 psi). Tank pressure between 0,5 to 1,5 kgf/cm <sup>2</sup> (7 to 21 psi).
	<b>AirLess Spray Gun</b>	Dilute up to 10% (vol.) with recommended thinner. Use nozzles between 9 to 17 and pump pressure between 140 to 175 kgf/cm <sup>2</sup> (2000 to 2500 psi).



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## SURFACE PREPARATION

**Wood**

Proceed sanding to increase the surface roughness. The surface must be dry, free of contaminants such as salt deposits, oil, grease, fat, dust, etc. and coated with suitable sealant.

**Concrete**

The surface must be dry, free from salt, oil, grease, dust, grease and other contaminants and coated with a suitable sealant. In the case of new concrete, use muriatic acid 10% solution to neutralize it. Afterwards, rinse with plenty of water; wait total drying and apply.

**Recommended sealant**

It can be used directly as a sealer, diluting to 10% as primer at the first coat.

**Coated Surfaces**

Consult our our Technical Department. The surface must be clean and free of contaminants as oils, fat, grease and dust. Must not present peeling's areas. Proceed light sanding (220) to break the gloss.

**Recommended TopCoat**

Not applicable

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**SHELF LIFE**

12 months

**UN NUMBER**

1263

**HAZARD NUMBER**

33

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## IMPORTANT RECOMMENDATIONS

1. The practical spreading rate of the product varies according to the applied thickness, application method and techniques, type and rugosity of the surface and ambient conditions.
2. The weight/l, viscosity and drying values were obtained in laboratory at a temperature of 25°C. At an altered temperature, the results might be different from the specified ones.
3. Pot life is shortened by higher temperature and by the increase of catalyzed volume.
4. Component B consists of isocyanate, which is reactive with moisture in the air. Therefore, every use of the product, close the container as soon as possible so that does not lose its efficiency.

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## SAFETY PRECAUTIONS

1. Improper use and handling of this product can be hazardous to health and cause fire or explosion. Do not use it without first taking all appropriate measures to prevent property damage and injuries.
2. Storage: keep the product in sheltered, well-ventilated areas. Maximum temperature: 40° C. Must not be directly exposed to the sun.
3. Flammable: flammable product, which must be kept distant from ignition sources, and do not smoke nearby.
4. Inhalation: Avoid breathing vapors, keeping proper ventilation during application and drying.
5. Handling: wear proper protective clothing and masks, goggles, etc. Do not eat or drink nor allow children and animals to be near the application area.



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## HEALTH HAZARDS

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1. Skin contact: wash affected area thoroughly with neutral soap.
2. Clothing contact: remove clothing and wash it.
3. Leakage: Isolate the area, and do not smoke nearby. If large quantity leaked in confined area, wear protective masks. Do not inhale vapors. Stop leakage with sand, sawdust or soil, and transfer liquid and solid to separated recipients for disposal.
4. Fire: protect non-affected recipients with water spray. Extinguish fire using carbon dioxide, foam or dry chemical.
5. Eyes contact: flush eyes with large amounts of clean water for at least 10 minutes, and get medical attention immediately.

IMPORTANT: For further information consult the product MSDS (Material Safety Data Sheet).

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