

# Technical Data Sheet

## HYDROGUARD® Novolac

Serie 160377

### PRODUCT DESCRIPTION

Two components water based phenolic epoxy coating composed by third generation interpenetrate polymers networks and nucleophilic modified hardeners.

It enjoys high mechanical properties and a pleasant, smooth and velvety appearance.

Free of flammable organic solvents, quick-drying and recoatable without limits in time.

### INTENDED USES

HYDROGUARD Novolac was formulate for the protection of steel and stainless steel operating in the temperature range between -80 ° C and + 240 ° C.

Thanks to the special and innovative formulation provides excellent chemical resistance in immersion that allow its use for the protection of internal surfaces of tanks and / or other (see resistance list).

Is recommended for CS-1,3,4 and SS-1,2,3 systems of NACE SP0198 Standard Practice for coatings to control corrosion under insulation (CUI).

### TECHNICAL INFORMATION

Product type	Water based epoxy phenolic			
Colours	Limited colors			
Solids (% +/- 2)	57 (by Volume)	63 (by Weight)	SOV/VOC (g/liter)	<85 Directive 2004/42/CE
Specific Gravity (g/liter +/- 100)	1314		SOV/VOC (g/liter) (calculated)	<85 Directive 2010/75/CE
Flash Point (°C +/- 2)	not flammable			
Appearance	matt and smooth			
Temperature Resistance (°C)	from -80 to +240 (dry) - immersion (see resistance list)			

### APPLICATION DATA

Application Range	Film tickness per coat in micron		Theoretical spreading rate		Consumption
	Dry	Wet	m²/l	m²/kg	g/m²
	(min - max)				
Typical	100 - 200	176 - 351	5.7 - 2.9	4.3 - 2.2	-
	<b>125</b>	<b>220</b>	<b>4.6</b>	<b>3.5</b>	<b>289</b>

  

Room Temperature	min 10°C	Max 40°C	Relative Humidity	min 5%	Max 80%
Mixing Ratio	10 - 1 (by weight)		8,1 - 1 (by volume)		
Pot life	4 h				
Thinner/Cleaner	clear water (max. 3-5% by weight)				

Application methods      Airless or conventional spray, brush or roller.

### Guideline for airless spray

Pressure at nozzle	15 Mpa (150 kp/cm <sup>2</sup> , 2100 psi)
Nozzle tip	0,46 - 0,58 mm (0,018 - 0,023" )

**Ti.Pi.Ci. s.a.s. di C.M. Pinto & C.**

Via Val Lerone, 21 – 16011 Arenzano (GE) – Tel. 0109111368 r.a. – Fax 0109134188  
P.IVA e C.F. 01346900994 - <http://www.tipici.net> – e-mail: [tech@tipici.net](mailto:tech@tipici.net)

**HYDROGUARD® Novolac**

**Series 160377**

**SURFACE PREPARATION**

the substrate must be clean and dry. Surface contamination is to be removed by detergents and fresh water cleaning. Blast cleaning to min. Sa 2,5 and medium roughness profile (according to standard ISO 8503-2).

**CONDITION DURING APPLICATION**

the temperature of the substrate should be min. 10°C and min. 3°C above the dew point of the air. The temperature and relative humidity should be measured in the vicinity of the substrate.

**DRYING TIMES**

Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: good ventilation (outdoor exposure or free circulation of air), recommended film thickness, one coat on top of inert substrate.

Substrate temperature	Surface Dry <sup>1</sup>	Hard Dry <sup>2</sup>	Cured <sup>3</sup>	Dry to recoat <sup>4</sup>	
				minimum <sup>5</sup>	Maximum <sup>6</sup>
10°C		2h - 2,5h	4h - 5h	8h	-
20°C		1,5h	3h	6h	-
30°C		1h	2h - 2,5h	4h	-

- 1
- 2 Data resulted by tests and experience in pratical applications. A good ventilation can improve the drying time.
- 3 Data resulted by tests and experience in pratical applications.
- 4 Recommended data given for recoating with same generic type of paint.
- 5 In case of multi-coat application, drying times will be influenced by the number in sequence and by the total thickness of previous coat applied.
- 6 The surface should be dry and free from any contamination prior to application of the subsequent coat.

Given data must be considered as guidelines only. Actual drying time can only be decided at site, depending on age of existing system, generic types, numbers of coates, thinning, temperature, ventilation, etc.

**THIS PRODUCT IS INTENDED FOR PROFESSIONAL USE ONLY**

The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to Ti.Pi.Ci.'s technical documentation.

**STORAGE AND PACKAGING**  
**STORAGE**

the product should be stored in accordance with national regulations. The best storage conditions are to keep the packages in a dry space provided with adequate ventilation.

**SHELF LIFE** 6 months at room temperature  
**PACKAGING** 18 kg comp. A and 1,8 kg comp. B (19,8 kg KIT A+B)

**HEALTH AND SAFETY**

**For detailed information on the health and safety hazards and precautions for the use of this product, we refer to the Material Safety Data Sheet.**

**Disclaimer**

*The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under contitions beyond our control, we can not guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.*