

N0426R00 TECHNICAL DATA SHEET EPOPACK BIANCO REV. NUM. 1 05/13

1. CHEMICAL NATURE

2 pack chelate epoxy enamel (surface tolerance) for internal and external use with low yellowing and pulverization.

2. MAIN CHARACTERISTICS

- UHS (Ultra high solid) technology with low content of solvent (VOC < 120 gr/litre).
- The product doesn't need any surface preventive treatment before painting. It just need the greases and oils removal if the presence of these two elements is strong on the surface to protect.
- Economical product, it works like surface preparation, primer, top coat.
- Perfect adherence for direct applications on steel, cast iron, aluminium and galvanized sheet iron.
- Perfect insulating characteristic on surfaces contaminated by old paints with high grade of exfoliation (no long oil kind of paint as could revive) or rustproof from grade A till to grade D in accordance with Annex D normative ISO 8501-1:1988 and subsequent changes.
- Very good hiding power . It is suitable to cover surface metal defects (scratches , welding , etc.)
- Very low overspray
- Very fast drying (it works in the space of 48 h providing a single layer with the under substrate)
- Fantastic resistance to abrasion
- In case it is request sun rises protection, can be over painted with any kind of water or solvent based enamel after 12 hours since application.
- Characteristic for its perfect quality of resistance to chemical aggressions in industrial environments, extended water contact, corrosion and steam.
- Resistance to acids, alkali, detergents, greases and oils.

3. KIND OF USE

Painting again of tanks, chemical equipment, tools machines, oil pipeline, navy field, silos, trellis, metal frame work, tools machines addressed to difficult uses, chemical equipment, rotogravure machines, industrial mechanic, metal furniture, pipes , valves.

4. SURFACE PREPARATION

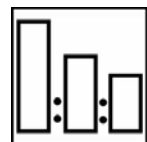
In order to obtain optimal results of painting, it is absolutely necessary to clean the surface to paint from oils and greases.

5. TIMES OF OVERPAINTING WITH SOLVENT OR WATER BORNE TOPCOAT

	Minimal interval at 25 °C		Minimal interval at 50 °C	
	SOLVENT	WATER	SOLVENT	WATER
ACRYLIC 1K	-	12 H	2 H	2 H
ACRYLIC 2K	12 H	12 H	2 H	2 H
EPOXY 1K	12 H	12 H	2 H	2 H
EPOXY 2K	12 H	12 H	2 H	2 H
PUR 1K	12 H	12 H	2 H	2 H
PUR 2K	12 H	12 H	2 H	2 H
SILICONE	12 H	12 H	2 H	2 H
SYNTHETIC FAST DRYING	12 H	12 H	2 H	2 H

Times above mentioned are just as an indication as dependent from the thermic inertia of the surface to paint

6. EQUIPMENTS AND GENERAL RECOMMENDATIONS FOR THE PRODUCT APPLICATIONS



MIXING RATIO

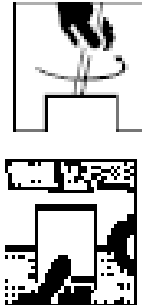
- CATALYSIS: 10% weight - 20% volume
HARDENER: EPOXY HARDENER 90.3895
- DILUTION: 8-10% spraying application with air mix spraygun
8-10% spraying application with airgun HVLP
3-5% spraying with membrane pump
0-3% spraying with air mix pump
0-3% spraying with airless or high pressure pump
5-10% by paintbrush or roller
- THINNER: DILUENTE PER EPOSSIDICI-Epoxy thinner (Cod. D0021)

	MIXTURE INDUCTION TIME	5-10 minutes
	POT LIFE MIXTURE (200 gr a 25 °C)	1-2 H depending on the room temperature
	VISCOSITY OF APPLICATION cup Ford 4 mm a 25°C	Not applicable
	EQUIPMENT	Air mix spray gun , nozzle 1,7-2,1 mm Air mix spray gun HVLP nozzle 1,6-1,8 mm Spraying membrane pump, nozzle 1,4-1,7 mm Spraying air mix pump, nozzle 0,25-0,28 mm Spraying high pressure pump 1,0-1,1 mm Paint brush, short haired roller
	PRESSURE	2,5-3,5 bar with air mix spray gun 2,0-2,5 bar (air) and 0,7-1,2 bar (nozzle) with air mix spray gun HVLP 3,0-4,0 bar (air) and 1,0-2,0 bar (material) spraying with membrane pump 2,0-3,0 bar (air) and 100 bar (material) spraying with air mix pump 2,0-3,0 bar (air) and 100 bar (material) spraying with airless or high pressure pump
	NUMBER OF COATS	1 soft + 1 full, or 2 full within 30-40 minutes each other depending on the kind of equipment and the method of application used, and on the structure of the object to paint. Maximal interval of over painting: 24 hours ; then the film need a sandpaper treatment
	THICKNESS FOR SINGLE COAT	Humid film = 170-220 microns Dry film = 150-170 microns
	FLASH OFF	30-40 minutes wait, then possible to be over-painted with a second coat
	RESA TEORICA	3-4 m ² /Kg (apparent loss 30% included) 220-250 gr/m ² (thickness 100 humid microns) 5,0-6,0 m ² /lt (apparent loss 30% included) 170-200 ml/m ² (thickness 100 humid microns)
	AIR DRYING (20°C)	Dust free 30-40 minutes Touch free after 4-5 h Mark free after 8-10 h Dry in depth after 24 h
	OVEN DRYING	A 50 °C completely dry after 2 h A 80 °C completely dry after 1h Dry in depth after 2 h
	EMPLOY CONDITIONS	Room temperature = 12-35 °C Surface temperature = at least 5 °C and surface free of condensate Environment humidity = 50-70% max



NOTE

1) for electrostatic applications mix with hardener and thin the product in the methods described and add 0,5-2,0% of ADDITIVO ELETTROSTATICO (Cod. C0033- additive for electrostatic
 2) to improve the drying time, add 0,5-1,0 % accelerator for epoxy - ACCELERANTE PER EPOSSIDICI (Cod. G0009)
 3) in order to make the look of the product semi-glossy or completely matt, add MATT POWDER OK 500 (Cod. C0039)



SUGGESTIONS

1) stir with care the mixture before paint and catalyse or thin just the minimal quantity of product intended to use in a maximal space of time of 60 minutes during summer time or 90 minutes during winter season.



ADDITIONAL INFO

1) Strictly follow ways of times of over painting to don't occur to phenomenon of removal or wrinkling up of the below layer of paint. This can be happened if the next coats are applied over the mentioned intervals
 2) suitable to uses of the normative 2004/42/CE - Dlgs 161/06

7. CLEANING OF EQUIPEMENT / POSSIBLE PAINT-STRIPPING

Immediately after the application and till 4-5 hours use DILUENTE NITRO EXTRA (NITRO THINNER) after that equipment or painted handmade need the paint-stripper.

8. STORAGE

The product must be preserved in the original closed can protected from excessive cold and warm conditions. Once the product is thinned , must be used within few days. Information about labels and manipulation are available in the safety data sheet . Liquid or solid contents must be disposed following the local law.

9. TECHNICAL DATA

LOOK	Thixotropic fluid
SPECIFIC GRAVITY (ISO 2811-1:1997)	2.080-2.100 gr/ml
SOLID CONTENT (ISO 3521:1993)	85,0% in weight – 65,0% in volume
VISCOSITY FLOW TIME (ISO 2431:1993)	Non applicable
DYNAMICAL VISCOSITY (ISO 2884:1:1999)	23000-25000 cPs
V.O.C. (THEORETICAL CALCULATION)	< 120 gr/litre
FILM LOOK	Plate, clean, compact and imperfections free film
ADHERENCE (ISO 4624:2002)	Minimum 8 N/mm ²
GLOSSY (ISO 2813:1994)	50-60 gloss
SURFACE HARDNESS (ISO 2815:2003)	90 Buchholz
ELASTICITY (ISO 1519:2002)	Distance between breaking point and mandrel extremity 1 mm
IMPACT TEST (ISO 6272-1:2002)	Direct breaking 60 cm (weight 1Kg) - Indirect breaking 80 cm (weight 2Kg)
SALT FOG (ASTM B 117-97)	after 1000 h blistering 0 and penetration grade 0 mm
QUV TEST (ISO 4892-1:1999)	after 200 h 50% loss of brilliance
WATER RESISTANCE (ISO 2812-2:1993)	After 1000 h no change from beginning conditions
ACIDS RESISTANCE (ISO 2812-1:1993)	after 300 h light matting and whitening ,no blistering
ALKALY RESISTANCE (ISO 2812-1:1993)	after 300 h no change from beginning conditions
BAD WEATHER RESISTANCE (ISO 2810:2004)	After 1 year 5% loss of brilliance and 3% colour change
LUBRICANT RESISTANCE (ISO 2812-1:1993)	after 300 h no change from beginning conditions
SOLVENTS RESISTANCE (ISO 2812-1:1993)	Resistant (film matting without removals)

All tests have been made on a grey colour sample (close to RAL 7001) for direct applications on carbon steel (thickness 10/10) after 7 days of storage at room temperature

Parameters of reference used to determine technical data:

<i>SURFACE HARDNESS</i>	<i>< 60 Buchholz = soft, 60-80 Buchholz = average, > 80-100 Buchholz = hard, > 100 Buchholz = very hard</i>
<i>ELASTICITY</i>	<i>< 1 mm = elastic, 1-3 mm = average, > 3-4 mm = stiff > 5 mm = very stiff</i>
<i>IMPACT TEST</i>	<i>0-40 cm = stiff, 40-80 cm = average, > 80 cm = elastic</i>
<i>SALT FOG (blistering maximal 2 and maximal grade of penetration 2 mm)</i>	<i>0-50 h = poor, 50-150 h = discrete, 150-350 h = average, 350-500 h = good, 500-800 h = perfect, > 800 h = very anticorrosive</i>
<i>QUV TEST (200 h)</i>	<i>0-10% = perfect, 10-20% = good, > 20% = poor</i>
<i>ACIDS RESISTANCE</i>	<i>Sulphuric acid solution 5%</i>
<i>ALKALY RESISTANCE</i>	<i>sodium hydroxide solution 5%</i>
<i>LUBRICANT RESISTANCE</i>	<i>Hydraulic Oil kind OSO 36</i>
<i>BAD WEATHER RESISTANCE</i>	<i>0-5% = perfect, 5-15% = good, > 15% = poor</i>
<i>SOLVENT RESISTANCE</i>	<i>Acetone</i>

All the information mentioned in this document have been written based on the technical knowledge gathed during the years and on laboratory tests . Anyway they can't be used as form of our responsibility or excuse for contestations deriving from the inappropriate employ of the product as the conditions of application can't be under our direct control.