

BASEPOX® PE 50-1120 YELLOW HIGH TG 3 LAYER PRIMER

Created on 18.09.2003
Revision 15 of 20.06.2014

PRODUCT DESCRIPTION

Epoxy Powder Coating Primer for multi-layer pipe coating systems with good adhesion and resistance against cathodic delamination.

Basepox® PE 50-1120 has preferably to be used in combination with polyolefin coating systems with high operating temperature.

PHYSICAL AND THERMODYNAMIC PROPERTIES

COLOUR

Yellow

DENSITY

1,52 ± 0,05 g/ml

ISO 21809-2 (clause A.7)
CAN CSA Z245.20-06 (clause 12.6)
ISO 8130-2 (air pycnometer)

SIEVE ANALYSIS

ISO 21809-2 (clause A.6)
CAN CSA Z245.20-06 (clause 12.5)
ISO 8130-1

< 250 µm (60 mesh)	≤ 0.5 %
< 150 µm (100 mesh)	≤ 3.0 %

MOISTURE CONTENT

(Weight loss 2h at 105 °C / 221°F)

≤ 0,5 %	acc. ISO 21809-2 (clause A.5)
	acc. CAN CSA Z245.20-06 (clause 12.4)
	acc. ISO 8130-7

REACTIVITY

GEL TIME @ 180°C / 356°F

53 ± 5 s acc. ISO 8130-6

HOT PLATE GEL @ 205°C / 401°F

22 ± 3 s acc. ISO 21809-2 (clause A.3)
acc. CAN CSA Z245.20-06 (clause 12.2)

DIVISIONE VERNICI IN POLVERE

Stabilimento e magazzini:

Via dell'Elettronica, 5 – 28924 Verbania Fondotoce (Vb) – Italy
Tel. +39 0323 5890.1 – Fax +39 0323 5890.661

Presidio acquisti:

Tel. +39 0323 5890.652 - Fax +39 0323 5890.661

Ricevimento Merci: Via dell'Edilizia, 8



Certificato n. 187

DIVISIONE VERNICI LIQUIDE

Stabilimento e magazzini:

Via Campagna, 42 – 25030 Berlingo (Bs) - Italy
Tel. +39 030 978960 – Fax +39 030 9789655

Presidio acquisti:

Tel. +39 030 9789635 – Fax +39 030 9789650

BASEPOX® PE 50-1120 YELLOW HIGH TG 3 LAYER PRIMER

Created on 18.09.2003
Revision 15 of 20.06.2014

THERMODYNAMIC CHARACTERISTICS

Differential Scanning Calorimetry (TA Instruments Q10)
According with norm ISO 21809-2 (clause A.8) equivalent to ISO 11357-2

Tg 1 (powder, inflection point)	58 ± 5° C / 135 ± 7 °F
Tg 2 (cured film, inflection point)	118 ± 5° C / 244 ± 9 °F
Delta H (Enthalpy)	95 ± 5 J/g

SHELF LIFE

According with ISO 8130-8 : 12 months at 25°C (77° F) and 65 % relative humidity.
Lower temperature and humidity are recommended. **Do not exceed 30°C (86°F)**.

SURFACE PREPARATION

Surface preparation by abrasive blast cleaning shall, as a minimum, meet the requirements of ISO 8501-1, Sa 2 ½ grade. The blast cleaned surface shall have a roughness RZ between 40 and 110 µm (1.6 – 4.4 mils) as measured in accordance with ISO 4287-1.
The surface shall be dry and free from contamination.
Chemical pretreatment is allowed .

APPLICATION

This powder performs best when applied through electrostatic spraying.
For fluidized bed application special grades are available.

RECOMMENDED FILM THICKNESS

Thickness of Basepox® PE 50-1120 as primer in multi-layer application is typically
75 - 200 µm (3 - 8 mils).

THEORETICAL YIELD

106 g /m² at 70 µm dry film thickness
9.40 m²/kg at 70 µm dry film thickness

DIVISIONE VERNICI IN POLVERE

Stabilimento e magazzini:

Via dell'Elettronica, 5 – 28924 Verbania Fondotoce (Vb) – Italy
Tel. +39 0323 5890.1 – Fax +39 0323 5890.661

Presidio acquisti:

Tel. +39 0323 5890.652 - Fax +39 0323 5890.661

Ricevimento Merci: Via dell'Edilizia, 8



Certificato n.187

DIVISIONE VERNICI LIQUIDE

Stabilimento e magazzini:

Via Campagna, 42 – 25030 Berlingo (Bs) - Italy
Tel. +39 030 978960 – Fax +39 030 9789655

Presidio acquisti:

Tel. +39 030 9789635 – Fax +39 030 9789650

BASEPOX[®] PE 50-1120 YELLOW HIGH TG 3 LAYER PRIMER

Created on 18.09.2003
Revision 15 of 20.06.2014

THEORETICAL CURING SCHEDULE

To achieve maximum performance properties the following application window is recommended for Basepox[®] PE 50-1120.

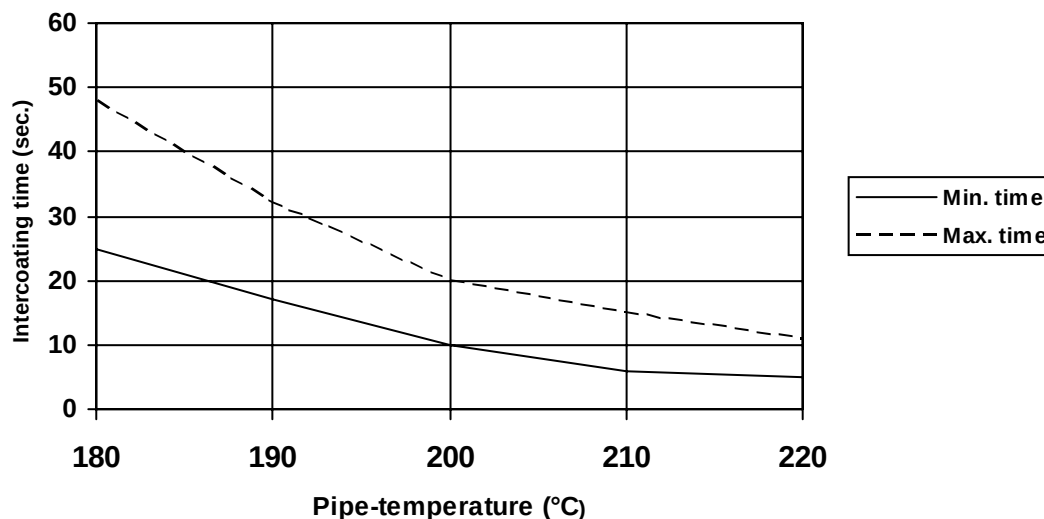
Minimum time before quenching	
at 180°C (356°F)	200 s
at 200°C (392°F)	140 s

MULTILAYER APPLICATION RECOMMENDED INTERCOATING TIME PRIMER - ADHESIVE

To achieve maximum performance properties the following application window is recommended.

The above figures are provided for guidance only. The exact timing should be verified by testing in line.

Application window



The above figures are provided for guidance only. The exact timing should be verified by testing in line.

DIVISIONE VERNICI IN POLVERE

Stabilimento e magazzini:

Via dell'Elettronica, 5 – 28924 Verbania Fondotoce (Vb) – Italy
Tel. +39 0323 5890.1 – Fax +39 0323 5890.661

Presidio acquisti:

Tel. +39 0323 5890.652 - Fax +39 0323 5890.661

Ricevimento Merci: Via dell'Edilizia, 8



DIVISIONE VERNICI LIQUIDE

Stabilimento e magazzini:

Via Campagna, 42 – 25030 Berlingo (Bs) - Italy
Tel. +39 030 978960 – Fax +39 030 9789655

Presidio acquisti:

Tel. +39 030 9789635 – Fax +39 030 9789650

BASEPOX[®] PE 50-1120 **YELLOW HIGH TG 3 LAYER PRIMER**

Created on 18.09.2003
Revision 15 of 20.06.2014

PROPERTIES OF CURED FILM **(Typical values)**

FLEXIBILITY

ISO 21809-2 (clause A.12)
CAN /CSA 245.20-06 (clause 12.11)
BG-CW 6

Pass 2.0° at 0°C (32°F)
Pass 3.0° at -30°C (-22°F)
Pass at 23°C (73°F) and - 30°C (- 22°F)

IMPACT RESISTANCE

ISO 21809-2 (clause A.13)
CAN/CSA 245.20-06 (clause 12.12)

> 1.5 J at -30°C (-22°F)

CATHODIC DISBONDMENT

ISO 21809-2 (clause A.9)
CAN/CSA 245.20-06 (clause 12.8)

20°C (68°F) , 28 days
65°C (149°F) , 24 hours
65°C (149°F) , 28 days

≤ 8 mm disbonded radius
≤ 6.5 mm disbonded radius
≤ 15 mm disbonded radius

RESISTANCE TO STRAIN POLARIZATION

28 days , BG CW6 pt. 1
ISO 21809-2 (clause A.14)
CAN/CSA 245.20-06 (clause 12.13)

Pass (No cracking)

BUCHHOLZ HARDNESS

UNI EN ISO 2815

Min. 91

REMARKS

Basepox[®] PE 50-1120 is also available as

- Basepox[®] PE 50-1121 and Basepox[®] PE 50-1122 with lower reactivity and extended gel time.

DIVISIONE VERNICI IN POLVERE

Stabilimento e magazzini:

Via dell'Elettronica, 5 – 28924 Verbania Fondotoce (Vb) – Italy
Tel. +39 0323 5890.1 – Fax +39 0323 5890.661

Presidio acquisti:

Tel. +39 0323 5890.652 - Fax +39 0323 5890.661

Ricevimento Merci: Via dell'Edilizia, 8



Certificato n.187

DIVISIONE VERNICI LIQUIDE

Stabilimento e magazzini:

Via Campagna, 42 – 25030 Berlingo (Bs) - Italy
Tel. +39 030 978960 – Fax +39 030 9789655

Presidio acquisti:

Tel. +39 030 9789635 – Fax +39 030 9789650