Metalox®-P2

Solvent based polyurethane primer

PRODUCT DESCRIPTION

A two component, low build, 50% solids polyurethane, designed for steel surfaces in atmospheric exposure. Metalox- P2 has outstanding water and anti-corrosion resistance. Metalox-P2 will cure at low temperature

INTENDED USES

- Priming of structural steel
- Priming of steel mining equipment
- Priming of galvanising steel
- Priming of steel where the blast profile is inadequate for the direct application of Liquimix polyurea and hybrid membranes

FEATURES

- Low build with up to 25 -38 Microns DFT possible in a single coat
- Fast cure at ambient temperature
- Full cure down to 5°C
- Convenient 4:1 by volume mix ratio
- Direct to steel coating

PRODUCT DATA

Volume Solids	50%
Theoretical Coverage	10 Square meters / Litre at 50 Microns DFT
Finish	Pigmented
Colour	Grey
Gloss	Semi-Gloss
Mixing Ratio	4:1 by volume
Pot Life	2.5 Hrs @ 25°C
Typical Thickness	25 to 38 Microns DFT (50 to 75 Microns WFT)
Cleaner	LM1 Thinner
Flash Point	>26°C
VOC	415 Grams/Litre
Specific Gravity	1.30

CURE & RECOAT

Metalox-P2 Standard Curative

Substrate Temp	Tacked	Hard Dry Note 1	Minimum Recoat Time	Maximum Self Recoat Time Note 2
5°C	8 Hrs	24 Hrs	8 Hrs	2 Days
10°C	6 Hrs	18 Hrs	6 Hrs	2 Days
15°C	4 Hrs	12 Hrs	4 Hrs	2 Days
25°C	2 Hrs	6 Hrs	2 Hrs	2 Days
40°C	1 Hrs	3 Hrs	1 Hrs	1 Day

Note 1: Full cure 7-14 days. Pull-off adhesion testing is best conducted after at least 3 Days cure

Note 2: Where the Metalox-P2 is exposed to direct sun and UV, the maximum recoat time will be considerably reduced. Contact Liquimix for advice

Metalox-P2 Fast Cure Curative

Substrate Temp	Tacked	Hard Dry Note 1	Minimum Recoat Time	Maximum Self Recoat Time Note 2
5°C	4 Hrs	8 Hrs	4 Hrs	1 Day
10°C	3 Hrs	6 Hrs	3 Hrs	1 Day
15°C	2 Hrs	4 Hrs	2 Hrs	1 Day
25°C	1 Hrs	2 Hrs	1 Hrs	1 Days
40°C	0.5 Hrs	1 Hrs	0.5 Hrs	1 Day

Note 1: Full cure 7-14 days. Pull-off adhesion testing is best conducted after at least 3 Days cure

Note 2: Where the Metalox P2 is exposed to direct sun and UV, the maximum recoat time will be considerably reduced. Contact Liquimix for advice

ENGINEERING DATA	Property	Method	Results
	Adhesion Testing	ASTM D4541	> 5 MPa

POT LIFE

Mixed Product Temperature	Gel Time (Note 1)
10°C	7.5 hrs
15°C	5 hrs
25°C	2.5 hrs
40°C	1 hr

Note 1: Pot Life is dependent on product temperature. Keep products cool

LIMITATIONS

- Pot Life is dependent on mix temperature
- Thin film dry times are dependent on temperature and film thickness
- Thicker films will take longer to cure through
- Higher cure temperatures and direct exposure to the sun will shorten the recoat times
- Product requires up to 14 days to develop full physical properties and adhesion. Pull-off or other adhesion testing might not produce accurate results during this period

SURFACE PREP

Steel

1. Remove all rust, mill scale, oil and any previously applied coatings back to bare clean steel using abrasive blast. Welds should have slag and spatter fully removed.
2. Abrasive blast to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of 60-100 microns is recommended.
3. For permanent immersion remove any soluble salts on the steel surfaces. The concentration of soluble salts must be less than 5 micrograms/cm²

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APPLICATION

Equipment

SIngle Component Graco Airless Pump	Tip Range 17-21 Thou (0.38-0.53 mm). Output fluid pressure at spray tip not less than 3000 Psi (210 kg/cm²)
Pressure Pot	Output fluid pressure not less than 50 Psi (2.51 kg/cm²)
Roller and Brush	Suitable for small areas
Temperature of material at gun:	Ambient

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 3°C higher than the dew point temperature
Substrate Temperature:	The substrate temperature must be a minimum of 5°C

Mixing

Always stir Metalox-P2 Part A (Coloured pigmented) and Part B in their original containers well before use.
Mechanically mix (by volume) 4 Part of Metalo- P2 Part A with 1 Part of Metalox-P2 Part B hardener (4:1). Do not vary from this ratio. Do not attempt to part mix and make up the entire mix.
Avoid entrapping air during mixing

Thinning

Thinning of Metalox-P2 is not considered necessary or desirable.

Cleanup

LM1 Thinner may be used for general clean-up of equipment and hoses. For soaking of contaminated metal parts use SWELL. The use of plastic soak containers with clip on lids and removable baskets makes the job easier. Replace the SWELL regularly as soon as it starts turning cloudy and dirty.
NOTE: NEVER USE SWELL TO CLEAN PAINTED SURFACES, AS IT WILL STRIP THE PAINT. NEVER USE SWELL TO FLUSH PUMPS AND HOSES. DO NOT ALLOW SWELL TO COME INTO CONTACT WITH THE OUTSIDE PROTECTIVE POLYURETHANE COVER OF HOSES.

COMPATIBILITY

Primers

No Data

Topcoats

Elaston-W80
Tufflon-P80
Tufflon-P90
Hybron-W90
Hybron-H90

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TYPICAL SYSTEM

Substrate	Environment	Substrate Prep	Coat	System	DFT
Steel	Steel Abrasive Resistant	Abrasive Blast	1st Coat 2nd Coat	Metalox P2 Hybron W90	30µm 3000µm
Steel	Structural Steel External	Abrasive Blast	1st Coat 2nd Coat	Metalox P2 Tufflon P90	30µm 3000µm
Steel	Structural Steel External	Abrasive Blast	1st Coat 2nd Coat 3rd Coat	Metalox P2 Tufflon P90 Opalon – S30	30µm 3000µm 75µm

STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and ignition and in original properly sealed containers. Protect from heat and frost. Protect contents from moisture.
A shelf life of 24 months minimum is typical with unopened containers if stored at ambient conditions at 25°C. If either component is opened and partially used, it should be purged with nitrogen or desiccated air and resealed.

PACK SIZE

20L Kits
16L of Metalox-P2 Part A in a 20L Container
4L of Metalox-P2 Standard Part B in a 4L Container or 4L of Metalox-P2 Fast Cured Part B in a 4L Container

5L Kits
4L of Metalox-P2 Part A in a 4L Container
1L of Metalox-P2 Standard Part B in a 1L Container or 1L of Metalox-P2 Fast Cured Part B in a 1L Container

HEALTH & SAFETY

Metalox-P2 is for professional use only.
The product contains isocyanates and may require the use of air feed hoods,
This product should not be used without consulting the Safety Datasheet (SDS) as published on the Liquimix website first.
Please observe all health and safety as well as environmental legislation that applies in your state

DISCLAIMER

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