

# **TECHNICAL DATA SHEET**

# **428 Barrier Prime EX-428**

#### PRODUCT DESCRIPTION

EX-428 A zinc phosphate polyamide cured epoxy primer.

#### SUBSTRATES & PREPARATION



#### **SUBSTRATE**

Structural steel



New steel sheet

Aluminium

Galvanised & Zinc Coated Steel

# **PREPARATION**

Abrasive blast clean to AS 1627.4 Class 2.5, apply primer within 4 hours of blasting.

Treat new steel sheet with 971 Metal Conditioner.

Do not allow the solution to dry, but wipe off with clean cloths. Rinse well with water to remove excess acid then wipe dry with clean cloths. Apply primer immediately after preparation of the clean surface.

Bare aluminium surfaces should be thoroughly cleaned using AA-6822 PROTEC® Heavy Duty Wax & Grease Remover before sanding, if necessary use a high grade scouring pad to remove heavy areas of grease and imperfections, all this is to be done in a wipe on wipe off motion using clean rags. Once dry, thoroughly abrade the surface using STARTLINE® P240 grit on an orbital sander or by hand rubbing using Startline P320. Once sanded the aluminium should be thoroughly blown down then cleaned with a 1:1 solution mix of 207 Methylated Spirits and clean water, using a wipe on wipe off action. This must be repeated until no residue shows on the cleaning cloths. The prepared aluminium must be primed within 6 hours or sooner after the preparation process; failure to do this will allow the aluminium to re-oxidise and the cleaning will have to be repeated.

Remove all surface contamination such as oil, grease or dirt by thoroughly washing the surface with AA-6822 *Protec* Heavy Duty Wax & Grease Remover. Sand the surface by mechanical means using P80 grit – P120 grit sand paper, then thoroughly blow down and clean the surface once again using AA-6822 *Protec* Heavy Duty Wax & Grease Remover.

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Stainless Steel Remove all surface contamination such as oil, grease or

dirt by thoroughly washing the surface with AA-6822 *Protec* Heavy Duty Wax & Grease Remover and wipe dry

with clean cloths.

Abrade the surface using Startline P240 grit on an orbital sander or by hand rubbing using Startline P320 grit. Thoroughly blow down to remove dust and clean the surface again using AA-6822 *Protec* Heavy Duty Wax &

Grease Remover.

Alternatively abrasive blast clean to AS 1627.4 Class 2.5,

apply primer within 4 hours of blasting.

NOTE: Stainless Steel will vary in grades and a test area is always recommended to test adhesion before final

application.

Masonry, Brick & Concrete Brush down to remove all dust and powdered materials by

wire or power brush. Chemically neutralize the surface if

efflorescence is present.

Timber Ensure surface is clean and dry and sanded to a smooth

finish

Fibreglass (GRP) Wash surface thoroughly using a mixture of warm water

and detergent to remove waterborne release agents.

Rinse with clean water and wipe dry.

Lightly dry sand entire surface with *Startline* P320 grit paper. Blow down then thoroughly clean the surface with AA-6822 *Protec* Heavy Duty Wax & Grease Remover, working in small areas then thoroughly wiping each

section completely dry with clean cloths.

Previously painted surfaces Remove all loose and flaking paint, rust etc. with

power/hand tool combination. Spot prime all bare steel areas.

Before proceeding with the coating of any previously painted surface, a test patch should be done. Providing there has been no "frying" or other film defect, proceed as

above.

If any "lifting" or frying is evident, strip back to bare metal

with 186 Superstrip Paint Remover.

Before and after any sanding operation, the substrate must be thoroughly degreased using AA-6822 *Protec* Heavy Duty Wax & Grease Remover to remove all traces of dirt, oil, grease, silicone, wax etc.

Substrates other than those stated above should be tested before use, to ensure that the performance of this product is suitable for its intended use.

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# **PRODUCTS**

EX-428 Pack A

428-5436 Buff X41 428-6186 Dark Grey 428-8306 White

Pack B Hardener OR

BAH20 Hardener

Reducers Normal conditions EXR20 Epoxy Reducer Normal

Hot conditions EXR30 Epoxy Reducer Slow

Very hot conditions or large equipment EXR40 Epoxy Reducer Extra Slow

Extreme hot conditions or large equipment EXR50 Epoxy Reducer Ultra Slow

# **MIXING RATIO BY VOLUME**



PRODUCT PARTS

EX-428 Pack A 4
Hardener 1

Reducer 0 - 20%

Mix Pack A and Pack B. Stir thoroughly and allow 10 minutes induction time.

Add reducer and stir thoroughly.

# **POTLIFE**



Catalysed material is useable for up to 6 - 8 hours at 25°C

#### **SPRAYGUN**



**CONVENTIONAL** 

**SETUP** 

• GRAVITY 1.8 mm - 2.0 mm • SUCTION 1.8 mm - 2.0 mm

**SPRAY PRESSURE** 

• CONVENTIONAL 3.1 - 4.5 bar (310 - 450 kPa, 45 - 65 psi)

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#### **APPLICATION & FLASH OFF**



#### SPRAY: CONVENTIONAL, HVLP

• APPLY 1 - 2 WET, EVEN COATS.

Allow 10 - 15 minutes flash off between coats at 25°C.

Note: Do not apply at temperatures less than 10°C, when the relative humidity exceeds 85%, or if the surface temperature is within 3°C of the dew point.

Product is suitable for brush application on small surface areas.

#### **BRUSH AND ROLLER APPLICATION**

Mixed material is ready for use for brush application. Apply full even coats. Brushing may be eased depending on weather conditions by the addition of EXR30 Epoxy Reducer Slow or EXR40 Epoxy Reducer Extra Slow.

### **DRYING TIMES**



# AIR DRY (25°C)

TOUCH DRY: 1 - 2 hoursHARD DRY: 16 hours

Note: Drying of EX-428 Primer is very dependent on temperature and humidity and it will not cure at temperatures below 5°C, or within 3°C of the dew point.

#### **RECOAT**



Can be re-coated as wet on wet application after 30 minutes minimum dry time at 25°C.

After maximum recoat time of 16 hours at 25°C primer must then be sanded before topcoating.

**TOTAL DRY FILM BUILD** 40 - 75 μm

**TECHNICAL PARAMETERS** 

**VOLUME SOLIDS** 45 - 50%, depending on colour

**COVERAGE (RFU)** ~6.6 metres squared per litre (m²/L)

**RESISTANCE PROPERTIES** 

WEATHERING Excellent when topcoated

ABRASION Excellent

**SOLVENT** Resists splash and spillage for common solvents

CHEMICAL Good to dilute acids, excellent to alkalis

**HEAT** Satisfactory up to 120°C Dry Heat

**TOXICITY** Non toxic in dry films

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# **EQUIPMENT CLEANING**

After use, clean all equipment thoroughly with cleaning solvent or thinner.

#### **HEALTH AND SAFETY**

Please refer to Safety Data Sheet (SDS) for full Health and Safety details, as well as product can labels.

This product is for professional use only.

The information given in this sheet is for guidance only. Any person using the product without first making further inquiries as to the suitability of the product for the intended purpose does so at his or her own risk and we can accept no liability for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of such use. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

Drying times quoted are average times at 25°C/77°F. Film thickness, humidity and shop temperature can all affect drying times.

PPG Industries Australia Pty Ltd, 14 McNaughton Rd Clayton, VIC 3168 Australia

**EMERGENCY RESPONSE NUMBER, Australia: 1800 883 254** 

PPG Industries New Zealand Pty Ltd, 5 Vestey Dr, Mt Wellington

Auckland, New Zealand

EMERGENCY RESPONSE NUMBER, New Zealand: 0800 000 096

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