

## **TECHNICAL DATA SHEET**

# **EX-408 PRIMERS for Australian Defence Force using 414-9153**

#### PRODUCT DESCRIPTION

Commercial Performance Coatings EX-408 Primer is a zinc phosphate containing, polyamide cured epoxy primer, that provides a tough abrasion resistant film with good build characteristics.

It is designed to be in compliance with:

APAS 0154/6 - EX-408 ZP Primer NIRR Beige 408-5208, EX-408 ZP Primer Grey 408-6098

APAS 0502/5 - EX-408 Multipurpose Epoxy Primer Grey 408-6916

NIRR = Near Infra Red Reflectance

**PRODUCTS** 

EX-408 Pack A 408-5208 EX-408 NIRR BEIGE

408-6098 EX-408 GREY 408-6916 EX-408 GREY

EX-408 Pack B 414-9153 EX-9153 Hardener

Reducers Normal conditions EXR20 Epoxy Reducer Normal

Hot conditions EXR30 Epoxy Reducer Slow

235 Epoxy Electrostatic Reducer

Very hot conditions or large equipment EXR40 Epoxy Reducer Extra Slow

247 Epoxy Electrostatic Extra Slow Reducer

Cleaner AA-6822 PROTEC® Heavy Duty Wax & Grease Remover

## **SUBSTRATES & PREPARATION**



Substrates should be prepared in accordance with APAS 0154 and APAS 0502 specifications. Specifications can be found at: www.apas.gov.au/SpecList.asp

## SUBSTRATE PREPARATION



Ferrous Metals Abrasive blast clean to AS 1627.4 Class 2.5, apply primer

within 4 Hours of blasting.

Metal pretreatment by zinc phosphating.

Non-Ferrous Metals Abrasive blast clean to AS 1627.4 Class 2.5, apply primer

within 4 Hours of blasting.

Metal pretreatment by suitable conversion coating. Note that the different types of conversion coatings can influence the adhesion of the primers. PPG recommends that any systems using a conversion coating on nonferrous substrates should be tested and approved by

PPG before production commences.

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Other Substrates Consult with a PPG Commercial Performance Coatings

Technical representative. Lab testing may be required to confirm the best preparation and painting process to meet

the APAS specifications.

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.

## **MIXING RATIO BY VOLUME**



 PRODUCT
 PARTS

 EX-408 Pack A
 4

 414-9153
 1

Reducer 20 - 40%

Refer to EX-408 Reducer Guide for suggested reducer selection for application temperature. Mix Pack A and Pack B. Stir thoroughly.

Add reducer and stir thoroughly.

## **POT LIFE**



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)

## PRESSURE POT

• SATA 1000K 1.3 mm - 1.7 mm • SATA 3000K 1.3 mm - 1.7 mm

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



#### SPRAY: CONVENTIONAL

May be applied by conventional or airless spray.

- APAS 0154: APPLY 2 TO 3 WET, EVEN COATS FOR 408-5208 NIRR BEIGE AND 408-6098 GREY, DRY FILM THICKNESS 50 75 MICRONS.
- APAS 0502: APPLY 1 TO 2 WET, EVEN COATS FOR 408-6916 GREY, DRY FILM THICKNESS 35 50 MICRONS.

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.

#### SPECIAL NOTE FOR NEAR INFRA-RED (NIRR) SYSTEMS

When applying coatings for conventional APAS 0154/3 paint systems it is usual to apply the primer to the whole vehicle or piece of equipment, then topcoat with any one of the camouflage colours. The disruptive pattern is then achieved by application of the other camouflage colours over the top of the first colour.

Do not use the above procedure for Near Infra-Red Reflectance. When painting NIRR systems, apply the NIRR primer over the whole vehicle or piece of equipment, then for APAS 0154/9 apply the NIRR Brown to the entire object, for APAS 0502/1 apply the NIRR Camouflage Green to the entire object. The other camouflage colours can then be applied to complete the camouflage pattern. Refer to the Polyurethane topcoat data sheets for more information.

Further note, the NIRR Camouflage Black when applied may have a 'greenish' appearance on the edges where the paint film is thin. This effect is because of the very specialized pigmentation needed to achieve the high Infra Red reflection required of the product. If the film build is kept even this effect is minimized.

## **DRYING TIMES**



## AIR DRY (25°C)

• TOUCH DRY: 1 - 2 hours • HARD DRY: 16 hours

Note: Drying of EX-408 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.

#### **FORCE DRY**

Please contact your local PPG Representative to discuss baking times and temperatures, as these vary depending on metal thickness and oven performance.

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## **RECOAT**



Can be re-coated after 8 hours or overnight dry.

After maximum recoat time of 72 hours at 25°C, a thorough sand with mechanical means is necessary followed by full re-priming.

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.

TOTAL DRY FILM BUILD 50 - 75 µm APAS 0154

35 - 50 μm APAS 0502

## **TECHNICAL PARAMETERS**

Conventional Infra Red APAS 0154/6

408-6098 EX-408 GREY 46.60%

Near Infra Red Reflection (NIRR) APAS 0154/6

408-5208 EX-408 NIRR BEIGE 50.60% **Multipurpose Zinc Phosphate Primer Grey APAS 0502/5** 408-6916 EX-408 GREY 51.5%

Wet on Wet Hardener APAS 0154 and APAS 0502

414-9153 EX-408 HARDENER 71.0%

**COVERAGE (RFU)** 

APAS 0154 6 - 11 metres squared per litre (m<sup>2</sup>/L)
APAS 0502 6 - 11 metres squared per litre (m<sup>2</sup>/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

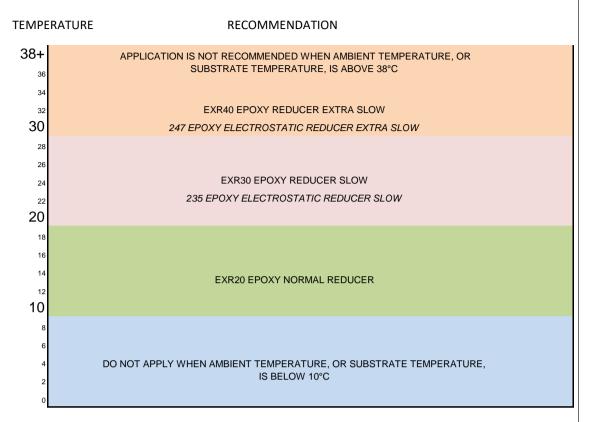
**TOXICITY** Non toxic in dry films

## **EQUIPMENT CLEANING**

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

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## **EX-408 REDUCER USAGE GUIDE**



This chart is provided as an approximate guide to when the different thinners should be used. Differences in application technique and the size of the components being painted will influence the optimum thinner choice. Do not apply when temperature is either below 10°C or within 3 degrees above the dew point or relative humidity exceeds 85%.

### **HEALTH AND SAFETY**

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

This product is for professional use only.

times

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

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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