

PR 143 epoxy primer

Description

PR 143 is a two-pack, ambient curing, epoxy primer developed for the internal and external protection of aircraft. The base component contains strontium chromate for long term corrosion inhibition. For details of schemes incorporating PR 143 please consult the relevant Scheme Sheets.

Fully cured PR 143 possesses excellent resistance to aircraft fluids such as phosphate ester hydraulic oils and, combined with its superior water resistance and adhesion characteristics, offers a significant advantage over conventional epoxy primers.

PR 143 is approved to the following specifications:
 AIMS 04.04.001/003
 AVN 7-003
 AFS 1806
 AFS 1835
 BSX33B
 DTD 900/6064
 ABR 7-0133

For further information on specification release requirements, please contact PRC-DeSoto International.

Application properties (typical)

(At 23°C/50%RH unless otherwise stated)

Product code numbers

Base	PR 143
Activator	ACT 143
Thinner	T 187

Flash points, (Abel closed cup)

PR 143	23°C
ACT 143	23°C
T 187	30°C

Mix ratio, by volume

Base:activator:thinner	2:1:1
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Volatile organic compound (VOC),

mixed ready for use

(ASTM-D 3960)	550 g/litre
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Viscosity,

BS B3	26-30 seconds
DIN 4	13-14 seconds
FORD 4	15-17 seconds
AFNOR 2.5	45-55 seconds

Coverage, mixed ready for use, theoretical value, no loss

@ 15-20 microns film thickness 12-16 m²/litre

Pot life	8 hours
Dry to mask	4 hours
Dry to overcoat	2 to 6 hours
Force drying	3 hours @ 70°C or 1 hour @ 125°C

PR 143 is compatible with all types of spray equipment. For details on the application parameters please consult the relevant Scheme Sheets or call PRC-DeSoto International.

Colours	Yellow, green and black
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Performance properties (typical)

When tested with CA 40000 over sulpho-chromic pickle pre-treatment PR 143 will pass or exceed the requirements of AIMS 04-04-001, e.g.:

Dry adhesion

Cross hatch (ISO 2409)	Grade 0
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Flexibility

Mandrel @ 23°C (ISO 1519)	2mm
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Water resistance

336 hours @ 23°C (ISO 1521)	
Cross hatch (ISO 2409)	Grade 1

Resistance to fluids

Phosphate ester (Type IV)	
336 hours @ 70°C (ISO 2812)	
Scratch hardness, (ISO 1518)	1200 g

Corrosion resistance, creep

Alternating immersion	
1500 hours (EN 3212)	1.25 mm

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Note: The application and performance property values above are typical for the material but are not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage life

The storage life of PR 143 is twenty four months from date of manufacture when stored at temperatures between 5°C and 35°C in the original unopened containers. Partly used containers must be re-sealed immediately after use. Once opened, activator ACT 143 must be used within two months.

Health precautions

This product is safe to use and apply when recommended precautions are observed. Before using this product read and understand the Material Safety Data Sheet which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme exposure.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.