

# Powder penetrant developer

### Scope

ARDROX 9D4A dry powder developer is a homogeneous blend of synthetic white powders of fine particle size. It does not contain any mined materials and has very low impurity levels.

ARDROX 9D4A is used to develop the complete range of ARDROX fluorescent penetrants. Application of this developer renders any defect indications much easier to see when viewed under ultra-violet light (black light) than conventional powder developers.

ARDROX 9D4A offers outstanding advantages in speed of development and resistance to excessive bleed-out of penetrant from defects.

A certificate of analysis showing chlorine and sulphur content for any particular batch of this product is available on request.

### Chemicals required

ARDROX 9D4A

ARDROX penetrant remover

ARDROX fluorescent penetrant

### Method of use

After suitable pre-cleaning, penetrant application, penetrant removal and drying of the components, ARDROX 9D4A may then be applied in a dust storm cabinet or by an electrostatic gun or a powder applicator.

ARDROX 9D4A dry powder developer is used as supplied. After application of the developer the components must be left in contact with the powder for a minimum period of 10 minutes. After this time the excess developer is removed by shaking or it is gently blown off with low pressure, filtered air at 0.3 bar/5 psi maximum and the components inspected in a darkened area under ultra-violet light. For optimum results on very fine defects, a development time of 30 minutes is recommended.

For advice concerning application equipment contact your local Chemetall Aerospace Technologies Representative.

### **Effects on materials**

When ARDROX 9D4A is used in the prescribed manner it has no significant effect on any common materials of construction. It is completely safe to use on all metals, plastics and rubbers.





# Technical information

Appearance: Light, fluffy, free-flowing, white powder. Non-fluorescent.

 $110 \text{ kg/m}^3$ 

Bulk Density:

These are typical values only and do not constitute a specification.

Store in a dry place. Ensure that containers of ARDROX 9D4A are sealed to avoid the ingress of any moisture.

# **Equipment materials**

Equipment/tanks can be constructed of stainless steel, polythene, polypropylene or PVC.

# Safety guidance

Before operating the process described it is important that this complete document, together with any relevant Safety Data sheets, be read and understood.

# General information

Chemetall PLC supplies a wide range of chemical products and associated equipment for cleaning, sanitising, descaling, paint and carbon removal, metal protection and non-destructive testing. Sales Executives are available to advise on specific problems and applications.

### Labour and environmental protection

All local and national regulations on the transport, storage, use and waste treatment of chemicals in concentrated or diluted form and as working solutions must be obeyed.

Further specific information on the products can be found in the EC Safety Data Sheets supplied. The user should also pay strict attention to information and hazard symbols shown on product labels.

# Waste disposal

All waste waters must be treated in accordance with national legislation and local regulations prior to discharge to the sewer.

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