

# Ardrox<sup>®</sup> NQ1

## Non-Aqueous Developer

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### PRIMARY APPLICATION

**Ardrox<sup>®</sup> NQ1** is a Form d and Form e non-aqueous developer. It is a liquid product consisting of a finely divided powder dispersed in a non-halogenated volatile solvent system.

**Ardrox<sup>®</sup> NQ1** is used with Type I and Type II penetrants.

### CHEMICAL CHARACTERISTICS

Appearance.....	Milky pale green suspension
Density .....	Approximately 7.32 lb/gal (0.88 g/ml)
Flash point.....	53°F PMCC
VOC .....	729 g/ltr
Vapor pressure .....	90 mm Hg
Sulfur content.....	< 1000 ppm
Halogen.....	< 1000 ppm

### APPROVALS

AMS 2644  
 ASTM E165  
 NAVSEA 250-1500-1  
 ASME Boiler and Pressure Vessel Code: Section V, Article 6

### APPLICATION PROCEDURE

Apply **Ardrox<sup>®</sup> NQ1** by spray after thoroughly cleaning surface, applying penetrant, removing penetrant, and drying surface.

### THOROUGH MIXING

Thoroughly mix **Ardrox<sup>®</sup> NQ1** before and during use. The liquid is a suspension of a finely divided powder suspended in a solvent and the powder settles out during storage and while in use, unless continually agitated.

### CORRECT FILM THICKNESS

The function of the developer is to draw the penetrant into surface defects, to encourage the penetrant to spread into the developer film and to provide a good color contrast between the penetrant indicator and the surrounding background. The purpose of using the developer is to produce a thin, even coating which just obscures the surface.

Too heavy a film of developer will tend to blur indications. Too light a film will fail to develop indications sufficiently and will not create a strong enough color contrast.

To obtain the correct film thickness, hold the aerosol 6 to 12 inches over the area being inspected and make three or four passes with the aerosol.

## ADEQUATE VENTILATION

**Ardrox**<sup>®</sup> **NQ1** vapors are flammable. To prevent **Ardrox**<sup>®</sup> **NQ1** vapor buildup, use adequate ventilation.

## INSPECTION AND INTERPRETATION

Carry out inspection during daylight or under UVA (365nm) illumination in a darkened area, depending upon the type of penetrant used.

A line indicates defects such as cracks, lap cold shuts and forging bursts. A dotted line may represent very tight defect. Porosity, shrinkage, lack of bond and leakage show as dots or as areas of color. Deep short cracks show as round indications.

Since penetrant from defects tends to spread through the developer film, the size of the colored area surrounding each defect gives some idea of the relative size of that defect. Larger defects contain a large volume of penetrant which spreads over a larger surrounding area. Sometimes the original path of the defect is obscured by the surrounding colored region.

## SAFETY AND HANDLING

Prior to handling and use of any of the materials referenced in this document, the Material Safety Data Sheets should be read and understood by all personnel in contact with these materials.

## KEEP OUT OF REACH OF CHILDREN

## STORAGE

Dry indoor storage at temperatures between 40°F and 100°F is recommended, away from any incompatible materials referenced in the Material Safety Data Sheets. All containers should be tightly closed when not in use.

## SHELF LIFE

The shelf life is 3 years (2 years for aerosols).

## DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, and local regulations. The process solution can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.

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