

Ardrox[®] 970P22

Water Washable Fluorescent Penetrant

VOC-Free*, Type I (fluorescent), Method A (water washable) and Method C (solvent removable) AMS 2644 approved inspection penetrant.

PRIMARY APPLICATION

ARDROX[®] 970P22 has been approved for sensitivity Level 1.

This penetrant is formulated to provide:

- Low cost
- Bright, crisp indications
- Low residual background
- Temperature stability
- Heat and UV fade resistance
- Over-wash resistance
- Low toxicity
- Flash point >200° F (93°C)
- Suitable for electrostatic application

*Note: Propellant used in aerosol contains VOC

CHEMICAL CHARACTERISTICS

flash point.....	>200° F (93°C) minimum, ASTM D113, (PMCC)
appearance	greenish-yellow
sulfur content.....	100 ppm
chloride content.....	200 ppm
fluorides.....	20 ppm
sodium content.....	60 ppm
density	0.85 to 0.88 g/ml at 68°F (20°C)
viscosity.....	6.0 to 8.9 centistokes, per ASTM D445

APPROVALS

In addition to being approved to AMS 2644, **Ardrox[®] 970P22** conforms to the requirements of the ASME Boiler and Pressure Vessel Code, Section V, Article 6, and AECL for applications in the nuclear industry. Chemetall Oakite manufacturing facilities are QS-9000 and ISO 9001 certified

APPLICATION PROCEDURE

ARDROX[®] 970P22 may be applied by brushing, tank immersion, conventional and electrostatic spraying. The following typical process sequence illustrates the recommended method of use:

1. Preclean/Dry - ARDROX[®] 6333, 6333A or ARDROX[®] 9PR50.

All surface contamination (rust, paint residues, grease, scale, etc.) must be completely removed. After cleaning, make sure that the component is completely dry and cool, 120 °F (49°C) or lower, before applying the penetrant.

2. Penetrant Application

Apply **Ardrox[®] 970P22** to the surface and leave on for a suitable dwell period. This dwell period is normally 5 minutes minimum. If the contact time exceeds 120 minutes, the penetrant should be reapplied to the surface.

3. Water Wash - 25 to 40 psi, 1 to 3 Minutes, 50 to 100° F (10 to 38° C)

Use either one or a combination of manual spray or automatic spray tank rinses. The times given are a guide only. Practical trials should be carried out to establish the most suitable conditions for specific components.

4. Oven Dry, Air Recirculating - Oven Set at 160°F (71°C) maximum

Use the minimum time necessary to thoroughly dry the components. Use clean, filtered, low-pressure compressed air to remove pockets of water before oven drying.

5. Developer Application

Dry Developer - Apply **Ardrox[®] 9D4A** (using a dust storm cabinet) or by dusting the material on to the surface to be inspected.

Non-Aqueous Developer - Spray apply **Ardrox[®] 9D1B** using suitable spray equipment or from an aerosol can. Allow 5 minutes minimum before inspection.

Inspection - Inspect each of the components under ultra-violet light (black light) as required.

6. Method of Control

Details of the procedures to check material in use, the intensity of ultra violet lights etc., are contained in AMS 2644. If further information is required, please contact Chemetall Oakite.

EFFECTS ON MATERIAL

ARDROX[®] 970P22 is non-corrosive to most common metals. It meets the corrosion requirements of AMS 2644 for aluminum, steel and magnesium. It is compatible with titanium and nickel alloys. It may stain or soften some plastics and rubbers; where appropriate, a compatibility test is recommended.

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 of **ARDROX[®] 970P22** 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.

Oakite Products, Inc. ("Oakite") warrants that the product or products described herein will conform with its published specifications. The products supplied by Oakite and information related to them are intended for use by buyers having necessary industrial skill and knowledge. Buyers should undertake sufficient verification and testing to determine the suitability of the Oakite materials for their own particular purpose. Since buyer's conditions of use of products are beyond Oakite's control, Oakite does not warrant any recommendations and information for the use of such products. OAKITE DISCLAIMS ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE USE OF ITS PRODUCTS.

Chemetall
Oakite



Oakite Products, Inc. P.O. Box 602, 50 Valley Road, Berkeley Heights, NJ 07922 • **Oakite Canada Limited** 115 East Drive, Bramalea, Ontario L6T1B7
Tel. (800) 526-4473 (908) 464-6900 FAX (908) 464-4658 Web site: www.oakite.com E-Mail: oakite.products@chemetall.com
Distributors and Licensees Worldwide