

ARDROX[®] 9881

PENETRANT REMOVER / HYDROPHILIC EMULSIFIER

1 Description

Ardrox[®] 9881 is a hydrophilic type emulsifier used for the removal of the Ardrox[®] 981x series of post-emulsifiable fluorescent penetrants (Method D). It is to be diluted in water then applied by immersion or foam-on method.

The use of Ardrox[®] 9881 minimizes background fluorescence on part surfaces, as well as bleed out of excess penetrant from hollow parts. It is economical to use since it can be applied at 10% by volume for immersion and less than 5% for foam-on applications.

Ardrox[®] 9881 is a blend of biodegradable surface-active agents, coupling solvent and corrosion inhibitors. It is low in sulphur, halogen and alkali metal content. In addition to that, Ardrox[®] 9881 shows an improved odor and bath stability and it is designed to meet the harshest surfactant regulations.

Ardrox[®] 9881 is available as bulk concentrate material or ready-to-use (5%) foam-on aerosol cans on special order.

Approvals

- ✓ SAE AMS 2644
- ✓ CFM International as per AMS 2644
- ✓ Pratt & Whitney PMC 4355-6 & FPM Master Supplement
- ✓ Rolls Royce CSS 232 & OMat 621K
- ✓ SAFRAN Group IN-5000
- ✓ GE Commercial Engines as per AMS 2644

Ask your Chemetall representative for a complete list of approvals

2 Physical and chemical properties

Property	Typical Value	Unit	Test Method
Appearance	-	Clear, pink liquid	-
Density at 20°C / 68°F	1.01	g/ml	Volumetric
pH at 100 g/l	8.2 – 9.2	-	-

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

3 Operation procedure

The procedure described below is recommended for general use. Where relevant, the process specifications of the approving authorities must be closely followed.

After suitable pre-cleaning, penetrant application and the necessary penetrant contact time, the components are initially given either a spray or air agitated water rinse (for approx. 1 minute) before the Ardrex[®] 9881 solution is applied.

The recommended concentration is up to 10% by volume in water (Ardrex[®] 9881 is approved to AMS 2644 to a maximum of 10 % concentration). The components should be completely immersed, withdrawn and allowed to drain.

The total contact time should be determined experimentally and will be dependent on the material and its surface finish. The time should be adjusted to the shortest possible contact time to give the minimum acceptable level of background. The contact times below serve as a guide only.

Immersion time: 30 sec. to 90 seconds
Drain time: 30 seconds

Drainings may be returned to the Ardrex[®] 9881 tank. After a suitable period of contact, the components are thoroughly rinsed with water either by spray application or immersion in an air agitated tank for the minimum period needed to give an acceptable level of background fluorescence.

The components should then be thoroughly dried in an air-circulating oven at a temperature between 50–60°C (122–140°F) using the minimum drying time before application of the developer (15 minutes maximum).

4 Bath maintenance

The concentration of the Ardrex[®] 9881 emulsifier solution should be measured and maintained with the use of a refractometer specifically calibrated using known dilutions of Ardrex[®] 9881.

5 Effects on materials

When Ardrex[®] 9881 is used in the prescribed manner, no significant corrosion is likely to be encountered on commonly used metals. Equipment/tank should be constructed of stainless steel.

6 Storage

Store in a cool place, with protection from freezing conditions. Shelf-life is 36 months.

7 Labor and environmental protection

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

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.

8 General information

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

The above details have been compiled to the best of our knowledge on the basis of tests and research work and with regard to the current state of our practical experience. This technical product information is non-binding. No liabilities or guarantees deriving from or in connection with this leaflet can be imputed to us. Statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. The reproduction of any or all of the information contained in this leaflet is expressly forbidden without Chemetall's prior written consent.

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