

## Ardrox 8571

Water dilutable, High Sensitivity Fluorescent Magnetic Ink Concentrate.

### Description

**Ardrox 8571** is a high sensitivity fluorescent magnetic liquid concentrate. It should be diluted with water for use and is inhibited against corrosion of ferrous metals.

**Ardrox 8571** is a water based fluorescent magnetic ink concentrate containing magnetic particles which comply with AMS 3044.

**Ardrox 8571**, when diluted with water, is suitable for revealing surface and near surface defects in ferro-magnetic materials eg. mild and low alloy steels.

The true sensitivity of fluorescent magnetic inks is no higher than that of the corresponding non fluorescent inks but the contrast provided by the fluorescent inks is of a higher order. Viewing is therefore easier and the added contrast provided by fluorescent inks is also useful when inspecting oxidized steels or when inspecting for defects at the base of threads or undercuts. The product is generally used in conjunction with an electro-magnetic machine which will enable the necessary magnetic flux to be generated in the component under test.

### Method of Use

The component to be inspected must be reasonably free from rust, paint, scale and grease; heavy deposits of these should be removed first. The components should be sufficiently clean for the diluted **Ardrox 8571** to completely "wet" the surface. The component is magnetized by a suitable method and the magnetic ink applied either by dipping, spraying or flowing over the surface. The component is then inspected in a darkened area under ultra violet light for defects which show as a collection of bright yellow particles.

The normal usage concentration is 1.0 litre of **Ardrox 8571** diluted to 50 litres with water. The solids volume of the tank should be checked regularly. This is best carried out by running 100ml of the thoroughly stirred ink into an ASTM 096 centrifuge tube allowing to settle for 60 minutes and reading the solids volume in ml. If it is below the required volume **Ardrox 8571** should be added.

## Effects on materials

The diluted **Ardrox 8571** is inhibited against corrosion on steel and is safe on materials generally used for the construction of magnetic particle inspection machines.

## Chemical and Physical Properties

Appearance (daylight):	Readily suspendible brown particles in a clear liquid base.
Flash Point:	Non-flammable
Solids Volume:	0.2 ± 0.05 (At the recommended dilution using an ASTM 096 centrifuge tube).

NOTE: The solids volume of the tank should be checked regularly in accordance with the method detailed in ASTM E 1444.

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

### General Information:

The brightness of indications from fluorescent magnetic inks will depend on the intensity Ultra violet illumination. The output of the lamp should, therefore, be checked regularly using the OLM 1000 Radiometer.

## Packaging

Available in 1 litre containers

## Safety, Transport and Storage Information

Please refer to the Material Safety Data Sheet.

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