

Lumor J Powder

Fluorescent Magnetic Ink Particles

General

Lumor J powder consists of finely divided fluorescent magnetic particles which will fluoresce brilliant yellow-green under ultraviolet radiation with a predominant wavelength of 365 nanometres. The particles have been selected for their high magnetic response, low coercivity (to avoid coagulation) and prolonged operational life.

Typical Properties

Particle Size	:	4 - 5 microns (mean)
Bulk Density	:	1.5
Settlement	:	0.1 - 0.3 (prepared bath)

Preparation

Lumor J powder is used by mixing directly with a suitable carrier fluid, such as high flash point odourless kerosene. Alternatively, Lumor J powder may be added to water which has been conditioned using a water treatment compound such as HC1 or HC2.

In both cases, Lumor J powder is added at concentrations between 0.8g and 1.0 g/litre, which will give approximate settlement volumes of between 0.15% and 0.30%.

Method of Use

The surface of the components to be inspected should be cleaned prior to testing as any contamination on the component can mask any indications and contaminate the magnetic particle ink.

Components are magnetised using the appropriate technique and the Lumor J ink is applied during magnetisation. Application of the ink should cease before the magnetising source is switched off to enable the particles to migrate to the area of flux leakage.

The component surfaces should be inspected under UVA of minimum output of 1,000 μ watts per square cm and peak wavelength of 365 nanometres.

The ambient light should also be less than 10 lux. Individual specifications may vary. Application of the prepared Lumor J ink may be by spray, flow-on or immersion.

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 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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