



Product Data

NEO ASTRA DGPUW

Magnetic Particle Inspection - Fluorescent Magnetic Ink Concentrate (Ultra Bright) for Underwater use

Neo Astra DGPUW is a high grade Fluorescent Magnetic Ink Concentrate which fluoresces bright green under UV black light (wavelength 365 nm) for use in the Underwater Magnetic Particle Inspection Process. The product is water based and when used in a submersible system is diluted using a suitable carrier fluid at the recommended rate of 10:1. Note: this dilution rate is a guide only as system ink output flow rates and pressures vary depending upon the systems employed.

Supplied in 500ml containers, Neo Astra DGPUW has good particle mobility using the highest grade of particles, selected for their response to very low magnetic field strengths and also low coercivity. This makes the Ink responsive whilst avoiding coagulation.

Typical Properties (not a specification)

Colour under White Light	Green
Colour under Black Light	Yellow-Green fluorescence
Flash Point	Non Flammable
Solid Content	0.25 – 0.75 typical by volume after 30 minutes (after Dilution 10:1)

Method of Use

Dilute and fill submersible ink bag. The magnetising field must be held whilst flooding the area to be tested with the ink. The ink must flow gently over the surface being tested. The magnetising field must be applied during application and inspection to avoid washing off indications. The fluid will require continual agitation/recirculation in use, to ensure even dispersion of particles. This inspection ink which should be viewed using UV light with a surface intensity of at least 1,000 $\mu\text{W}/\text{cm}^2$ with the benefit of allowing moderate ambient light. Anecdotally it has been demonstrated that defects can be found with up to 200 Lux of ambient light, with the product only fluorescing more under greater irradiance. However, to comply with BS EN 9934 ambient levels must be restricted to 20 Lux. Johnson and Allen recommend the use of a graduated ASTM 100ml pear shaped centrifuge tube to verify solid content. The solid content reading should be taken after 30 minutes.

Specification Compliance

NeoAstra DGPUW Complies with BS EN ISO 9934-2:2002 Pack size 500ml. (2.5L and 5L by arrangement).

COSHH - Please read the relevant SDS for this product.

Alternative Products (water based Magnetic Inks)

None for underwater use

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