

Product Data

NEO AQUA BCW

Colour Contrast Magnetic Particle Inspection – Black Magnetic Concentrate

Neo Aqua BCW is a high grade Black Magnetic Ink Concentrate for use in the Magnetic Particle Inspection Process. The product is water based and non-flammable when diluted at the recommended 50:1. Supplied in 500ml containers, Neo Aqua BCW 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. The concentrate contains wetting agents, a rust inhibitor and anti-foam.

Typical Properties

Form Viscous Black Liquid before dilution (Concentrate)

Density 1.6 at 15 °C (Concentrate)

Flash Point Non Flammable ℃

Solid Content 2.5 % Typical by volume after 1 hour (After Dilution 50:1)

Viscosity < 3cst at 40 °C

Method of Use

Trigger spray, wash bottle, immersion or wash hose from Bench Unit hopper delivery. The magnetising field must be held until spraying/washing ceases or for immersion applications, until the component has broken free of the surface. The fluid will require regular agitation in use to ensure even dispersion of particles. Johnson and Allen recommend the use of a 100ml centrifuge tube to verify solid content.

NeoAqua BCW (upon dilution) is flooded over the surface to be inspected whilst the area is magnetised in the required orientation

(The greatest build up occurring when surface defects are at 90° to the field applied) The magnetic field must be held on until ink application has finished to avoid washing off indications.

Defects will show up as well defined indications and inspection should be undertaken in good lighting conditions (White light over 500 Lux)

NeoAqua BCW can be used in conjunction with **Neopaint NPT16**, **Neopaint – 2** or **ECO – 2** Contrast Aid Paints.

The MPI System provides a high level of integrity when used on welded fabrications, pressure vessels, structures, pipes, castings, forgings and many other ferromagnetic components. Neo Aqua BCW is the safest of all the magnetic inks Johnson and Allen Ltd manufacture.

Although rust inhibited, it is recommended that finished components be dipped in a dewatering fluid before long term storage.

Specification Compliance

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

COSHH - Please read the relevant COSHH for this product.

Alternative Products (Magnetic Inks)-

Neocol BC Black Concentrate - (Hydrocarbon based) Neocol B - Ready mixed hydrocarbon based

Johnson and Allen Ltd, NeoCol Wks, Smithfield, Sheffield, S3 7AR. Tel +44 (0)114 2738066 Fax +44 (0)114 2729842.

e-mail info@johnsonandallen.co.uk www.johnsonandallen.co.uk