

BYCOTEST® 101



Ready-to-use Fluorescent Magnetic Ink

General description

BYCOTEST[®] 101 is an oil-based, ready-to-use fluorescent ink for wet method magnetic particle testing. The perfect choice for critical applications, it gives clear, fluorescent, yellow/green indications when viewed in a darkened area under UV(A) light of peak wavelength 365nm.

Applications

Used in conjunction with suitable magnetising equipment, 101 will locate medium-fine surface and slightly subsurface defects in ferrous materials. Typical defects found include shrink cracks, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Composition

101 is a suspension of fluorescent magnetic particles in a high-flash, low-odour petroleum distillate.

Benefits

- Ready to use
- · High sensitivity
- Clear indications

Typical Properties (not a specification)

Property	101	
Form and colour	Brown suspension	
Flash point	> 93°C (bulk)	
SAE sensitivity	8	
Viscosity at 38°C	2.5 mm²/s	
Settlement volume (1 hour)	0.15 - 0.25 ml	
Particle size (mean)	ca. 3 µm	
Sulphur content	< 200 ppm	
Halogen content	< 200 ppm	
Storage temperature	10°C to 30°C	
Usage temperature	-10°C to 50°C	

Like all Magnaflux materials, 101 is closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

General Method of Use

- Clean the component before testing to reduce the risk of contamination and provide a suitable test surface.
- Shake the aerosol can for 30 60 seconds initially to ensure that the ink is mixed thoroughly. You will need to shake the can repeatedly during use.
- Spray the ink onto all surfaces of the component. The indications will be formed during the application of a magnetising current.
- After inspection, the components should be properly demagnetised before cleaning.

Recommended Products

Product type	Product Name(s)
Pre-cleaning/ cleaning	BYCOTEST® C5, C10, C15
UV(A) lamps	MAGNAFLUX® EV6000 MAGNAFLUX® UV-LED miniSpot

Specification Compliance

Specification	101
AMS3046 (Aerosols only)	\checkmark
ASME B & PV Code, Sec V	\checkmark
EN ISO 9934-2	\checkmark
GOST R ISO 9934-2-2011	\checkmark



BYCOTEST® 101

Availability and Part Number



Health and Safety

Read the relevant Safety Data Sheet for this product before use. Safety Data Sheets are available on request from your Magnaflux distributor or via the Magnaflux website:

www.eu.magnaflux.com



