

# MG 601

## Wet Method Fluorescent Magnetic Particles

MAGNAGLO® MG 601 is a powder concentrate used to prepare fluorescent inks for high-sensitivity, wet method magnetic particle testing. The inks give clear bright yellow/green indications when viewed in a darkened area under UV(A) of peak wavelength 365 nm.



MG 601 is a top-up for MAGNAGLO® MF-655 WB ink concentrate.

### BENEFITS

#### Increases indication detection

- Find smaller, finer indications in critical applications with these highly sensitive particles.

#### Minimises inspection time

- Clear, bright indications form quickly with minimal background fluorescence.

#### Improve inspection consistency and reliability

- Maintain magnetic particle system performance over longer periods of time thanks to the highly-durable, easily-dispersed particles

### FEATURES

- High sensitivity
- Excellent fluorescent contrast
- Excellent particle mobility
- Optimised particle size distribution
- Durable particles
- Easily dispersed

### APPLICATIONS

#### Defect location: surface and slightly subsurface

#### Ideal for:

- Detecting very fine to fine discontinuities
- Critical applications
- Machined parts
- Smooth surface finish
- After secondary processing
- In-service inspections

#### Ideal for:

- Inclusions
- Seams
- Shrink cracks
- Tears
- Laps
- Flakes
- Welding defects
- Grinding cracks
- Quenching cracks
- Fatigue cracks

### COMPOSITION

Compounded fluorescent pigment and magnetic iron oxide.

# MG 601

## SPECIFICATION COMPLIANCE

- AMS3044
- ASME BPVC-V
- ASTM E709
- ASTM E1444/E1444M
- EN ISO 9934-2
- KTA 3905
- MIL-STD-2132D

## PRODUCT PROPERTIES

<b>Form and colour</b>	Light-brown powder
<b>SAE sensitivity</b>	8 - 9
<b>Particle size range</b>	3 - 5 $\mu\text{m}$
<b>Usage temperature</b>	< 60°C
<b>Settlement volume</b>	0.1 - 0.3 ml

Like all Magnaflux materials, MG 601 is closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

## USER RECOMMENDATIONS

<b>NDT Method</b>	Magnetic Particle Testing, Fluorescent, Wet Method
<b>Storage temperature</b>	10°C to 30°C
<b>Ink concentrate</b>	MF-655 WB
<b>Cleaner</b>	SKC-S
<b>UV lamp</b>	EV6000, EV6500, ST700
<b>Accessories</b>	Centrifuge Tube

## INSTRUCTIONS FOR USE

MG 601 is used for bath replenishment and concentration control of MF-655 WB.

During use, the magnetic content of any ink will become depleted so you will need to check your bath strength at least once each day. The most widely-used way of checking an ink's settlement volume is by using a graduated ASTM pear-shaped centrifuge tube.

When the settlement volume approaches the lower limit, you can add more MG 601 powder to the bath as long as it is still clean and uncontaminated. If the bath appears contaminated, or if it has been in use for a long time, replace the contents.

After inspection, remember to completely demagnetise your components before cleaning, to ensure easy removal of any residual powder particles.

## PACKAGING AND PART NUMBERS



061C026

## HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the Safety Data Sheets, which are available at [www.magnaflux.eu](http://www.magnaflux.eu)