

622.1

Oil-based Fluorescent Magnetic Concentrate



TIEDE® 622.1 is an oil-based fluorescent ink concentrate for wet method magnetic particle testing. It gives clear bright yellow/green indications when viewed in a darkened area under UV(A) light of peak wavelength 365 nm.

622.1 must be suspended in a petroleum-based vehicle (oil), such as Carrier II.

FEATURES

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

SPECIFICATION COMPLIANCE

- AMS2641
- AMS3044
- AMS3045
- ASME BPVC-V
- ASTM E709
- ASTM E1444/E1444M
- EN ISO 9934-2
- KTA 3905

APPLICATIONS

Defect location: surface and slightly subsurface

Ideal for:

- Detecting medium-fine discontinuities
- Welding defects
- Shrinking cracks
- Grinding cracks
- Quenching cracks
- Fatigue cracks

PRODUCT PROPERTIES

Form and colour	Yellow/brown liquid
Flash point	102°C
SAE sensitivity	8 - 9 (Ketos Ring)
Magnetic particles	MG 601
Particle size range	3 - 5 µm (average)

Like all Magnaflux materials, 622.1 is closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

USER RECOMMENDATIONS

NDT Method	Magnetic Particle Testing, Fluorescent, Wet Method
Storage temperature	10°C to 30°C
Usage temperature*	5°C to 55°C
Settlement volume	0.1 - 0.2 ml (1 hour)
Suspension Vehicle	MG/MX Carrier II
Cleaner	SKC-S
UV lamp	EV6000, ST700
Accessories	Centrifuge Tube

* For use of an inspection vehicle conforming to AMS2641, minimum temperature is 6 °C.

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COMPOSITION

A suspension of magnetic particles in a high-flash, low-odour petroleum distillate.

INSTRUCTIONS FOR USE

Clean the component before testing to reduce the risk of contamination and provide a suitable test surface.

Make up the ink bath based on the following guide:

Quantity of 622.1	Quantity of oil vehicle
0.5 litres (500 ml)	50 litres
0.75 litres (750 ml)	75 litres
1 litre (1,000 ml)	100 litres

Mix the ink thoroughly before and during use.

Apply by spraying to all surfaces of the component while applying a magnetising current. Remember to stop the flow of ink before the current is switched off, otherwise the force of the ink flood could wash away any indications.

After inspection, demagnetise your component before cleaning to ensure easy removal of any particle residue.

PACKAGING AND PART NUMBERS



061C068 (x 6)

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