Product Data Sheet

MAGNAGLO 14 AM

READY TO USE FLUORESCENT MPI BATH



General Description

14 AM contains MAGNAFLUX 14A powder as its main ingredient.

This material is the choice for aerospace applications giving clear fluorescent green indications when viewed in a darkened area under UV(A) of peak wavelength 365nm. A suitable UV source for such an application is the **Magnaflux ZB-100F**

Applications

14 AM is used in conjunction with suitable magnetising equipment and a UV(A) source to locate medium fine surface and slightly subsurface discontinuities in ferrous materials.

Typical defects found include shrink cracks, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Composition

14 AM is a prepared bath of 14A fluorescent powder and Carrier II (Oil Petroleum Vehicle). This product is ready to be used.

Typical Properties (not a specification)

Property	14 AM
Form	Brown liquid
Colour under UV (365 nm)	Yellow/green
SAE sensitivity	7-8
Settling volume	0.15-0.4 ml
Temperaturelimit	48 °C
Mean particle size	6 microns

Like all Magnaflux materials Magnaglo 20 B is closely controlled to provide unique batch to batch consistency and uniformity to assure optimum process control and inspection reliability.

Benefits

- ✓ Ready to use
- ✓ Good sensitivity
- ✓ Clear indications





Method of Use

Components should be cleaned prior to testing to provide a suitable test surface.

The product is ready to use from the container by spraying.

Shake can well to suspend the particles. Spray or pour onto properly magnetized test part, making sure that the entire surface to be inspected is covered. Inspect part. Indications will form immediately and appear as fluorescent green lines under a UV Black Light of 365 nm.

Note: Exposing 14AM aerosol cans to a strong magnetic field may adversely affect particle re distribution. 14AM aerosol cans should always be stored away from magnetizing equipment.

Age and/or exposure to elevated temperatures can adversely affect the particle dispersion properties of 14AM in aerosol cans. As such, we recommend verifying proper concentration of the product by performing a sensitivity check using a QQI or other known test standard prior to inspection.





Examples of 14 AM fluorescent indications on an ISO 9934 Type 1 reference block.

After inspection the components should be properly demagnetised before cleaning to ensure ease of particle removal.

Specification Compliance

Specification	14 AM
DOD-F-87935	√
AMS - 3045	\checkmark
AMS - 3046	\checkmark
Cummins IS-16048-13	\checkmark
ASTM E-709	\checkmark
ASTM E-1444	\checkmark
Boeing PS 21201	\checkmark
MIL-STD-2132	\checkmark
ISO 9934-2	\checkmark
British Std BS 4069	\checkmark

Availability

14 AM is available in Aerosol containers, part number F03011



Product Data Sheet



Health and Safety

- Safety Data Sheets for this product are available on request from your Magnaflux distributor or via the Magnaflux website (www.in.magnaflux.com).
- > Read the relevant Safety Data Sheets before use.

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