

| Batch Number        | 2501008    | Product Name | Magnaglo 14HF Oil Based<br>Fluorescent MPI Ink |
|---------------------|------------|--------------|--|
| Date of Manufacture | 02/01/2025 | B.B.E.       | 01/2030  |

# **Specification: Specification**

We certify that the above Magnetic Particle Inspection Material meets the requirements of the following specifications:

A. (For Aerosols only) AMS-3046H.

B. ASME Boiler and Pressure Vessel Code, 2023 Edition, Section V, Non-destructive Examination.

C. ASTM E 709-15, Paragraphs 8.1.2, 8.2, 8.3, 8.5, 8.5.3 & 8.5.4.1.

D. ASTM E1444/E1444M-22A, Paragraphs 5.5.2 and 5.5.3.

E. AMS 2641D Type 1 Oil vehicle. Flash point greater than 93°C.

F. Rolls Royce RRP 58004 (CSS 231).

G. SNECMA DMR70-520.

H. SAFRAN In-5300.

I. AMS 3044G (Magnetic particles used in the product).

We further certify that this material does not contain mercury as a basic element and no mercury bearing equipment was used in its manufacture.

## Specification

### Specification: AMS-3045G test results

We hereby certify that the above Magnetic Particle Inspection Material meets the requirements of Aerospace Material specification AMS-3045G, Magnetic Particles, Fluorescent, Wet method, Oil vehicle.

| Test  | Section | Limit                                     | Result        |
|---|---------|---|---------------|
| Contamination - Foreign Material            |         | No foreign material                       | Passed        |
| Contamination - Scum                        |         | No Scum                                   | Passed        |
| Contamination - Agglomeration               |         | No Agglomeration                          | Passed        |
| Concentration                               |         | 0.1 - 0.4 mL magnetic particles per 100mL | 0.20 mL       |
| Sensitivity-Ketos Ring Indications (SMT 24) |         | 7 Hole indications shown                  | 7 indications |
| Colour                                      |         | Fluorescence : Yellow Green               | Passed        |

### Specification: EN ISO 9934-2

When tested at the time of manufacture the following results were obtained.

The information is derived from our quality checks. It does not relieve the purchaser from examining the product upon delivery and gives no assurance of the product for any particular purpose.

| Test                          | Section                    | Limit  | Result   |
|-------------------------------|----------------------------|--|----------|
| Performance Reference block 1 | 7.1 in EN<br>ISO<br>9934-2 | Indication on Reference Block<br>1 (#072814)       | Passed   |
| Performance Reference block 2 |                            | Total length of indication on<br>Reference Block 2 | 8 cm     |
| Colour                        | 7.2 in EN<br>ISO 9934-2    | Light Brown Liquid                                 | Passed   |
| Particle Size - dl (SMT 41)   | 7.3 in EN<br>ISO 9934-2    | Report   | 5.22 μm  |
| Particle Size - da (SMT 41)   | 7.3 in EN<br>ISO 9934-2    | Report   | 7.76 μm  |
| Particle Size - du (SMT 41)   | 7.3 in EN<br>ISO 9934-2    | Report   | 11.32 μm |

#### Inspection Certificate

Abnahmeprüfungszeugnis DIN EN 10204.3.1 Certificat De reception Certificado di collaudo Keuringsrapport



| Fluorescent Co-Efficient        | 7.5 in EN<br>ISO 9934-2  | Shall be within 10% of the type testing     | 96.03 %            |
|---------------------------------|--------------------------|---|--------------------|
| Fluorescence of Carrier Fluid   |                          | Not brighter than quinine sulphate solution | Passed             |
| Flashpoint (SMT 14)             | 7.7 in EN<br>ISO 9934-2  | Report                                      | 102.5 °C           |
| Viscosity                       | 7.9 in EN<br>ISO 9934-2  | Less than 5mPa s at 20°C                    | 3.64 mPa s at 20°C |
| Mechanical Short Term Stability | 7.10 in EN<br>ISO 9934-2 | No decrease in sensitivity after test       | Passed             |
| Foaming                         | 7.11 in EN<br>ISO 9934-2 | No significant foaming                      | Passed             |
| Storage Stability               | 7.13 in EN<br>ISO 9934-2 | 5 Years                                     | Passed             |

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Prepared by

Approved by

Zeinef

### Notes:

1. Our batch number appears on the label of bulk containers. Aerosols have batch numbers printed on bottom of the container.

2. Most specifications require test results stated in percent, but some require parts per million (ppm). To convert "percent" figures to "parts per million" move the decimal four places to the right.

3. MIL-STD-271, MIL-STD-2132 and ASME Sec V, all require that materials be subject to a procedure to evaporate off volatile solvents before analysis for Sulfur and Halogens. According to these specifications, only those residues higher than 0.005 g/100ml shall be analysed for Sulfur and Halogens. Lower residues shall be reported.

4. The above certification gives the results obtained at the time of manufacture. Age and use may alter the properties of any material.

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