## **Inspection Certificate**

Abnahmeprüfungszeugnis DIN EN 10204.3.1 Certificat De reception Certificado di collaudo Keuringsrapport



Batch Number	240205	Product Name	690.1 Oil Based Fluorescent MPI Ink Aerosol
Date of Manufacture	19/02/2024 20/02/2024	B.B.E.	02/2027

# Specification: AMS-3045H test results

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

Test	Section	Limit	Result
Contamination - Foreign Material	3.3.1	No foreign material	Passed
Contamination - Scum	3.3.1	No Scum	Passed
Contamination - Agglomeration	3.3.1	No Agglomeration	Passed
Concentration	3.3.2	0.1 - 0.4 mL magnetic particles per 100mL	0.4 ml
Sensitivity-Ketos Ring Indications (SMT 24)	3.3.3	7 Hole indications shown	8 Indications
Colour		Fluorescence : Yellow Green	Passed

# **Specification: Specification**

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

- A. (For Aerosols only) AMS-3046H Paragraphs 3.3.1 to 3.3.7, 3.4.1 & 3.4.2
- B. ASME Boiler and Pressure Vessel Code, 2023 Edition, Section V, Non-destructive Examination.
- C. ASTM E 709-15, Paragraphs 8.1.2, 8.1.3, 8.2, 8.3, 8.5, 8.5.3, 8.5.4.1 & 8.5.5
- 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. AMS 3044H (Magnetic particles used in the product)
- G. KTA 3905, Paragraph B 3.2.2.2 (2)

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

Test	Section	Limit	Result
Specification	* * * * * * * * * * * * * * * * * * *		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 ISO 9934-2	Indication on Reference Block 1 (#072814)	Passed
Performance Reference block 2		Total length of indication on Reference Block 2	9 cm
Colour	7.2 in EN ISO 9934-2	Light Brown Liquid	Passed
Particle Size - da (SMT 41)	7.3 in EN ISO 9934-2	Report	5.97 μm
Particle Size - dl (SMT 41)	7.3 in EN ISO 9934-2	Report	6.50 μm
Particle Size - du (SMT 41)	7.3 in EN ISO 9934-2	Report	7.29 μm
Fluorescent Co-Efficient		Shall be within 10% of the type	106.05 %

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Fluorescence of Carrier Fluid	7.6 in EN Not brighter than quinine Passed
Flashpoint (SMT 14)	7.7 in EN ISO 9934-2 Report Passed
Viscosity	7.9 in EN ISO 9934-2 Less than 5mPa s at 20°C 3.12 mPa s
Mechanical Short Term Stability	7.10 in EN No decrease in sensitivity after Passed
Foaming	7.11 in EN ISO 9934-2 No significant foaming Passed
Storage Stability	7.13 in EN ISO 9934-2 3 years Passed

--- EOR ---

Prepared by

Approved by

## 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.

Magnaflux (A Division of ITW Ltd), Faraday Road, South Dorcan Industrial Estate, Swindon, Wiltshire, SN3 5HE, UK Tel: +44 (0)1793 524566 Fax: +44 (0)1793 490459 Email: sales.eu@magnaflux.com www.magnaflux.eu

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