

Inspection Certificate

Abnahmeprüfungszeugnis DIN EN 10204.3.1
Certificat De reception
Certificado di collaudo
Keuringsrapport



Batch Number	2310029	Product Name	622.1 Oil Based Fluorescent MPI Ink Concentrate
Date of Manufacture	30/10/2023	B.B.E.	10/2028

Specification: Specification

We hereby certify that the above Magnetic Particle Inspection Material when diluted 1:100 by volume with an oil vehicle meeting the requirements of AMS 2641D (Type 1), meets the requirements of Aerospace Material specification AMS-3045F, Magnetic Particles, Fluorescent, Wet method, Oil vehicle.

We further certify that the above Magnetic Particle Inspection Material when diluted 1:100 by volume with an oil vehicle meeting the requirements of AMS 2641D (Type 1), meets the requirements of the following specifications:

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

B. ASTM E 709-15, Paragraphs 8.1.2, 8.2, 8.3, 8.5, 8.5.3 & 8.5.5

C. ASTM E1444/E1444M-22A, Paragraphs 5.5.2.

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

E. 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: AMS 3045F

Test	Section	Limit	Result
Contamination	3.3.1	No foreign material, scum or agglomeration	Passed
Concentration	3.3.2	0.1 - 0.4 mL magnetic particles per 100mL	0.15 ml
Sensitivity-Ketos Ring Indications (SMT 24)	3.3.3	7 Hole indications shown	9 indications
Colour	-	Fluorescence : Yellow Green	Passed

Specification: EN ISO 9934-2

When tested at the time of manufacture the above concentrate, diluted 1:100 by volume with an oil vehicle meeting the requirements of AMS 2641C (Type 1) 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	7.1 in EN ISO 9934-2	Total length of indication on Reference Block 2	9.5
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	6.50 µm
Particle Size - dl (SMT 41)	7.3 in EN ISO 9934-2	Report	5.97 µm
Particle Size - du (SMT 41)	7.3 in EN ISO 9934-2	Report	7.28 µm

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Fluorescent Co-Efficient	7.5 in EN ISO 9934-2	Shall be within 10% of the type testing	97.93 %
Fluorescence of Carrier Fluid	7.6 in EN ISO 9934-2	Not brighter than quinine sulphate solution	Passed
Flashpoint (SMT 14)	7.7 in EN ISO 9934-2	Report	106.5°C
Viscosity	7.9 in EN ISO 9934-2	Less than 5mPa s at 20°C	3.16 mPa s
Mechanical Short Term Stability	7.10 in EN ISO 9934-2	No decrease in sensitivity after test	Passed
Foaming	7.11 in EN ISO 9934-2	No significant foaming	Passed
Storage Stability	7.13 in EN ISO 9934-2	5 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.