Inspection Certificate
Abnahmeprüfungszeugnis DIN EN 10204.3.1
Certificat De reception
Certificado di collaudo
Keuringsrapport

Batch Number	**2610027**	**Product Name**	ZL-440 Fluorescent Penetrant
Date of Manufacture	13/10/2026	**B.B.E.**	10/2031

Specification: Specification:

1. Meets the requirements of and has been tested for sulfur and halogens according to:
a) ASME Boiler and Pressure Vessel Code, 2025 Edition, Section V, Non-destructive Examination.

b) ASTM E-165/E-165M-23, Paragraph 7.1.

c) MIL-STD-2132E, March 29, 2016, Paragraph 6.1.3.

d) NAVSEA T9074-AS-GIB-010/271, September 11, 2014, Paragraph 5.3.1 & 5.6.2

2. It is hereby certified that the above listed inspection material and batch number meets the requirements of AMS 2644J and is approved by the U.S. Air Force and listed on the QPL-AMS-2644.

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

4. It is further certified that this material meets the requirements of ASTM E1417/E1417M-21 EDT1, Paragraph 5.1

Test	Section	Limit	Result
Specification			Passed

Specification: Ion Testing Results

Test results obtained were as follows:

Test	Section	Limit	Result
Sulphur Content (S)			0.0011%
Halogen Content (F + Cl)			0.0015%

Specification: AMS 2644J Penetrant Test Results

When sampled and tested according to paragraph 4.3.2 section 4.2.2.1 of AMS 2644J the following results were obtained:

Test	Section	Limit	Result
Fluorescent Brightness	3.3.8.3.3	Complies with standard	83.33%
Penetrant Removability	3.3.8.7	Complies with standard	Passed
Water Content	3.3.8.8	Complies with standard	51.56%
Flashpoint	3.3.3	Complies with standard	No Flash
Viscosity	3.3.4	Complies with standard	15.18 mm2/s

Specification: EN ISO 3452-2

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
Appearance	6.1 in EN ISO 3452-2	Equal to standard	Passed
Sensitivity for ISO 3452-2 (SMT 58)	6.2 in EN ISO 3452-2	Equal to Level 2 reference system	Passed
Density (SMT 50)	6.3 in EN ISO 3452-2	0.950 – 1.050 g/cm3 @ 20°C	0.999 g/cm3 @ 20°C
Washability (SMT 47)	6.6 in EN ISO 3452-2	Equal to standard	Passed
Corrosive Properties	6.11 EN ISO 3452-2	No Corrosion on Aluminum Alloy	Passed
Sulphur Content (S)	6.12 EN ISO 3452-2	< 200 ppm	0.0011%
Halogen Content (F + Cl)	6.12 EN ISO 3452-2	<200 ppm	0.0015%

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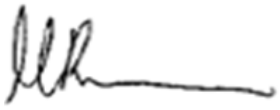
ISO-3452 Brightness	6.7 in EN ISO 3452-2	100 % ± 10 % of Type Test Sample	101%
Viscosity	6.4 in EN ISO 3452-2	13.00 – 16.00 mm2/s @ 38°C	15.18 mm2/s
Flashpoint	6.5 in EN ISO 3452-2	93°C Min for Bulk	No Flash

--- 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.

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