

**Inspection Certificate**

Abnahmeprüfungszeugnis DIN EN 10204.3.1  
 Certificat De reception  
 Certificado di collaudo  
 Keuringsrapport



<b>Batch Number</b>	<b>2309021</b>	<b>Product Name</b>	ZL-70
<b>Date of Manufacture</b>	07/09/2023	<b>B.B.E.</b>	09/2024

**Specification: Specification**

We hereby certify that when tested at the time of manufacture, the above material:

1. Meets the requirements of and has been tested for sulfur and halogens according to:

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

b) Anion analysis by ASTM D129 decomposition followed by Ion Chromatography method Annex A4.

c) ASTM E-165/E-165M-18, Paragraph 7.1.

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

e) ISO 3452-2

2. Meets the requirements of EN ISO 3452-1, EN ISO 3452-2 (Sensitivity level 3), AMS 2644H and ASTM E 1417/E 1417M-21 Paragraph 5.1 & 6.5.1.

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.

Test	Section	Limit	Result
Specification			Passed

**Specification: Ion Test Results**

Test results obtained were as follows:

Test	Section	Limit	Result
Halogen Content			70ppm
Sulphur Content			35ppm

**Specification: AMS 2644H Penetrant Test Results**

Type 1 Level 3 Method A/C Penetrant

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

Test	Section	Limit	Result
Flashpoint (SMT 14)	3.3.3		116.5°C
Viscosity	3.3.4		17.33 cS
AMS 2644 Brightness	3.3.8.3.2		113%
Water Tolerance (SMT 2)	3.3.8.5		26.6%
Penetrant Removal	3.3.8.6		Passed
Water Content (SMT 18)	3.3.8.7		0.32%

**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.

Type I Level 3 Method A Penetrant

Test	Section	Limit	Result
Appearance	6.1 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 3 reference system	Passed
Density (SMT 50)	6.3 in EN ISO 3452-2	Nominal 0.941 g/cm <sup>3</sup> @ 20°C (Limits 0.894 – 0.988)	0.940
Viscosity	6.4 in EN ISO 3452-2	±10% Nominal Value	17.33 cS

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Flashpoint (SMT 14)	6.5 in EN ISO 3452-2	Nominal 100°C (Limits 98°C Minimum)	116.5 °C
Washability (SMT 47)	6.6 in EN ISO 3452-2	Equal to standard	Passed
ISO-3452 Brightness	6.7 in EN ISO 3452-2	± 10 % of Type Test Sample (Limit not less than 90%)	113%
Corrosive Properties	6.11 EN ISO 3452-2	No Corrosion on Magnesium Alloy	Passed
Halogen Content	6.12 EN ISO 3452-2	<200 ppm	70ppm
Sulphur Content	6.12 EN ISO 3452-2	<200ppm	35ppm
Water Content for EN ISO 3452-2	6.20 in EN ISO 3452-2	<5%	0.32%

--- 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.