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

Batch Number	**2611012**	**Product Name**	Zyglo ZL-37 Fluorescent Penetrant
Date of Manufacture	12/11/2026	**B.B.E.**	11/2031

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, 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.

2. Meets the requirements of Rolls Royce RRP 58003 (CSS 232), AMS 2644J and ASTM E1417/E 1417M-21EDT1 Paragraph 5.1 & 6.5.1.

Penetrant brightness tested according to ASTM E 1135.

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
Sulphur Content (S)			0.0263%
Halogen Content (F + Cl)			0.0034%

Specification: AMS 2644J Penetrant Test Results
Type 1 Level 4 Penetrant

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
Flashpoint (SMT 14)	3.3.3		125.5 °C
Viscosity	3.3.4		14.92 mm2/s (cSt)
Fluorescent Brightness	3.3.8.3.3	Complies with standard	Passed
Penetrant Removability	3.3.8.7	Complies with standard	Passed
Water Content	3.3.8.8	Complies with standard	0.04%

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
Density (SMT 50)	6.3 in EN ISO 3452-2	Nominal 0.924 g/cm3@ 20°C (Limits 0.950 – 0.980)	0.958 g/cm3@ 20°C
Flashpoint (SMT 14)	6.5 in EN ISO 3452-2	Nominal 110°C (Limits 98°C Minimum)	125.5 °C
Corrosive Properties	6.11 in EN ISO 3452-2	No Corrosion on Magnesium Alloy	Passed
Viscosity	6.4 in EN ISO 3452-2	±10% Nominal Value	14.92 mm2/s (cSt)
Sensitivity for ISO 3452-2 (SMT 58)	6.2 in EN ISO 3452-2	Equal to Level 4 reference system	Passed
Washability (SMT 47)	6.6 in EN ISO 3452-2	(Water Washable Penetrants Only)	Passed

Fluorescent Brightness	6.7 in EN ISO 3452-2	100 % ± 10 % of Type Test Sample	99%
Water Content for EN ISO 3452-2	6.20 in EN ISO 3452-2	(Water Washable Penetrants Only)	0.04%

Specification: Pratt & Whitney Aircraft Results
VENDOR'S REPORT - TEST RESULTS

REPORTS, MATERIALS CONTROL LABORATORY
PRATT & WHITNEY AIRCRAFT
(Plant to which material is shipped)

This is to certify that paragraph number 1 + 5 apply to the shipment described below (Insert at least one of the first 4, plus 5 if applicable)

1. (Applicable to all raw material, to parts made from raw material furnished or purchased by vendor, or to assemblies of which some or all components are made from raw materials furnished or purchased by vendor) Material, parts, or components of assemblies have been inspected & accepted to the specifications involved, & results of tests required by PWA are as shown herein.

2. (Applicable to parts or assembly components made from raw material furnished by PWA and not chemically or metallurgically treated by vendor so as to change surface or internal condition significantly) Parts or assemblies have been machined or formed from material furnished by PWA to make these parts or components of assemblies.

3. (Applicable to parts or assembly components made from raw material furnished by PWA and chemically or metallurgically treated by vendor so as to change surface or internal condition significantly) Parts or components of assemblies have been made from raw material furnished by PWA to make these parts or components of assemblies. Parts, components of assemblies, or assemblies have been inspected and accepted to the specifications involved, and results of tests required by PWA are as shown herein.

4. (Applicable to repaired or reworked raw material, parts or assemblies) The raw material, parts or assemblies have been reworked or repaired in accordance with PWA instructions, and are the same material, parts or assemblies returned for such reworking or repair, except for replacement of assembly components, in which case paragraphs 1 & 5 are also applicable.

5. (Applicable to all assemblies, and to parts when specifically, authorised by purchaser) Results of all chemical and physical tests not shown below as well as all other evidence which shows acceptability of raw materials & assembly components, are on file and available for inspection at any reasonable time.

PART OR ASS'yNO (Size if no part no): PMC 4354-9
CHG.LTR:
SPECIFICATION AS ORDERED * PWA 300 Rev. BV
QUANTITY:
DATE SHIPPED:
QUANTITY:
DATE SHIPPED:
LOCATION OF PWA PLANT SHIPPED TO:
PACK SUB NO:
PO NO:
HEAT, LOT, CODE or BATCH NO: As listed above
RAW MATERIAL VENDOR:
TYPE COMPOUND or CASTING: ZL-37 Penetrant
PWA HEAT CODES:
* If material, parts or assemblies do not entirely conform to specification requirements, the deviation and authority for furnishing such material are indicated below:
Magnaflux certifies that ZL-37 meets the requirements of PMC 4354-9

Test	Section	Limit	Result
Flashpoint (SMT 14)		93°C Minimum	125.5 °C
Separation of Constituents - Homogenous		None	Passed
Fluoride Content		≤ 50 ppm	1ppm
Sodium (SMT 44)		≤ 0.010 %	0.0006%
Chloride Content		≤ 400 ppm	33ppm
Sulphur Content (S)		</=1000ppm	263ppm
Viscosity		11.67 - 15.79 mm2/s (cSt)	14.92 mm2/s (cSt)
Water Content for P&W			0.04%
Fluorescent Brightness for P&W		Minimum 95%	101%

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--- 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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