Certification

Product Name	**ZL-60D**	Batch Number	**26L072**
Date	**11/20/2026**	Best By Date	**11/2031**
Classification	**Type 1 Method A, C Level 2 Penetrant**	Purchase Order	

It is hereby certified that when tested at the time of manufacture, the above listed material and batch number meets the requirements of and has been tested for Sulfur and Halogens according to:

- ASME Boiler and Pressure Vessel Code, Section V 2007-2025 Edition, Nondestructive Article 6 paragraphT-641 and Article 24 as applicable.
- ASTM 165/E-165M-23 Paragraph 7.1.
- NAVSEA T9074-AS-GIB-010/271 (April 30, 1997, including Notice 1, September 11, 2014) Paragraph 5.3.1 and 5.6.2
- MIL-STD-2132E, March 29, 2016, Paragraphs 7.1, 7.1.2 and 7.1.3, Appendix C, Paragraph 40.

The following test results were obtained:

Sulfur <10 ppm <0.0010 wt., % CL+F <10 ppm <0.0010 wt., %

Specification: ASTM E1417, Paragraph 5.1 Meets requirements.

Meets requirements.

Specification: AMS 2644J.

When tested according to paragraph 4.3.2, Sampling Plan A, the following test results were obtained:

- 4.2.2.1 Penetrant Tests:

Test	Requirements	Result
Flash Point	3.3.3	221 ° F
Viscosity (10.36 cs. Nominal)	3.3.4	10.32 cst
Penetrant Brightness (FP-4PE Standard)	3.3.8.3.3	97.99 %
Water Tolerance	3.3.8.5	26.2 %
Penetrant Removal	3.3.8.7	PASS
Water Content	3.3.8.8	0.08 %

It is further certified that this material does not contain mercury as a basic element and that no mercury bearing equipment has been used in its manufacture.

Approved by:



Quality Control Manager

Notes:
1. Our batch number appears on the bottom of all aerosol cans and on the label of all bulk containers.
2. Most specifications require test results to be 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. The above certification gives the results obtained at the time of manufacture. Age and use may alter the properties of any material.

Magnaflux
155 Harlem Ave.
Glenview, IL 60025
P: 1-847-657-5300

Specification: Pratt and Whitney Test Results
Vendor 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 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 material furnished or purchased by vendor.) Material, parts, or components of assemblies have been inspected and accepted to the specifications involved, and results of tests required by PWA are 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 of components of assemblies have been made from raw material furnished by PWA to make these parts or components of assemblies. Parts, components of assemblies have been inspected and accepted to the specifications involved, and results of tests required by PWA are as show herein.
4. (Applicable to repaired or reworked raw material, parts or assemblies.) The raw materials, 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 and 5 are also applicable.
5. (Applicable to all assemblies, and to parts when specifically authorized by purchaser.) Results of all chemical and physical tests not shown below, as well as all other evidence which shows acceptability of raw materials and assembly components, are on file and available for inspection at any reasonable time.

PART OR ASS'Y NO (Size if no part no): PMC 4350AJ
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: 26L072
RAW MATERIAL VENDOR:
TYPE COMPOUND or CASTING: ZL-60D
PWA HEAT CODES:

If materials, parts or assemblies do not entirely conform to specification requirements, the deviation and authority for furnishing such materials are indicated below:

Magnaflux certifies that ZL-60D meets the requirements of PMC 4350AJ

Test	Limit	Result	
Flash Point	200º F	221	º F
Viscosity	9.32 - 11.40 of cst @100F	10.32	cst
Water Content	< 5%	0.08	%
Brightness	65% Min	97.99	%
Chemical Properties	**Limit**	**Result**	
Fluoride Content	≤ 50 ppm	<10	ppm
Chloride Content	≤ 400 ppm	11	ppm
Sulfur Content	≤ 0.100%	<0.0010	%
Sodium Content	≤ 0.0100%	0.0056	%

It is further certified that this material does not contain mercury as a basic element and that no mercury bearing equipment has been used in its manufacture.

Approved by:

Quality Control Manager

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