MAGNAFLUX

Certification

Zyglo Penetrant, ZL-56

Date: 03/12/2021
Purchase Order:
Batch #: 21C023

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, 2004, 2007, 2010, 2013, 2015, 2017, and 2019 Edition, Nondestructive Examination, including 2005, 2006, 2008, 2009b, and 2011a Addenda, Article 6 Paragraph T-641 and Article 24 as applicable.
- ASME Boiler and Pressure Vessel Code, 1995, 1998 and 2001 Edition, Section V Nondestructive Examination, including 1999, 2000, 2002 and 2003 Addenda, Article 6 Paragraph T-640 and Article 24 as applicable.
- ASME Boiler and Pressure Vessel Code, 1986, 1989 and 1992 Edition, Section V , Nondestructive Examination, Article 6 including 1992 Addenda, Paragraph T-625, 1993 Addenda Paragraph T-640 and Article 24 as applicable.
- ASTM E-165-92, ASTM E-165-94, ASTM E-165-95, ASTM E-165-02,ASTM E-165-09, ASTM E-165/E-165M-12, ASTM E-165/E-165M-18, Paragraph 7.1.
- MIL-STD-271F(SH) June 27, 1986, Paragraphs 5.3 and 5.3.1, including Notice 1 Paragraph 5.6.1 June 21, 1993.
- 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 41 ppm 0.0041 wt., % of residue. CL+F <10 ppm <0.0010 wt., % of residue

Cleaner residue (see note 3) NA g/100g NA g/100ml

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.

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.

Mathew Plamoottil
Quality Assurance Manager

Laurie Marx
Quality Control Manager

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

MAGNAFLUX

Certification

Zyglo Penetrant, ZL-56

Date: 03/12/2021
Purchase Order:
Batch #: 21C023

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

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

- 4.2.2.1 Penetrant Tests:

Flash Point (PMCC), 3.3.3	227	º F
Viscosity, 3.3.4 (16.9 cs. Nominal)	16.25	cs@100 º F
Fluorescent Brightness, 3.3.8.3.3(FP-4PE Standard)	113.1	%
Water Tolerance (Method A), 3.3.8.5	25.51	%
Water Tolerance (Method B, D), 3.3.8.5	NA	
Removability, 3.3.8.6	PASS	
Water Content, 3.3.8.7	0.36	%

- 4.2.2.2Emulsifier Tests:

Flash Point (PMCC), 3.3.3	NA	º F
Viscosity, 3.3.4 (cs. Nominal)	NA	cs@100 º F
Water Content (Method B and D Only), 3.3.9.6	NA	%

- 4.2.2.3 Developer Tests:

Developer Fluorescence, 3.3.10.2	NA
Developer Removability, 3.3.10.4	NA
Redispersibility, 3.3.10.5	NA

- 3.3.11.4 Remover Tests:

Penetrant Removal, 4.4.11.2	NA

It is further certified that this material meets the requirements of ASTM E 1417, Paragraph 5.1.

Batch Numbers appear on labels of bulk containers and on bottoms of aerosol cans.

Mathew Plamoottil
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Laurie Marx
Quality Control Manager

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