

# 14AM Prepared Magnaglo Bath

Date: 06/25/2024

Purchase Order:

Batch #: 24F02C

It is hereby certified that the above listed magnetic particle inspection material and batch number meets the requirements of the following specifications:

- ASME Boiler and Pressure Vessel Code, Section V, 2004, 2007, 2010, 2013, 2015, 2017, 2019 and, 2021 Edition, Nondestructive Examination, including 2005, 2006, 2008, 2009b, and 2011a Addenda, Paragraph T-731 (B) and Article 25 as applicable.
- ASME Boiler and Pressure Vessel Code, Section V 1995, 1998 and 2001 Edition, Nondestructive Examination, including 1995 Winder Addenda, 1999, 2000, 2002 and 2003 Addenda, Paragraphs T-752, T-731(B) and Article 25 as applicable.
- ASTM E-709-21, Paragraphs 8.1.3, 8.5.4, 8.5.4.1 and 8.5.5.
- ASTM E-1444/E1444M-22a Para 5.5.1 and 5.5.2 and ASTM E-3024/E3024M-22a, Para 5.5.2 and 5.5.3
- NAVSEA 250-1500-1, Rev 18, August 2013, Para. 12.4.1.6., 12.4.2.3, 12.4.2.3.1, and 12.4.2.3.2.
- NAVSEA T9074-AS-GIB-010/271( April 30, 1997 including Notice 1, September 11, 2014 Rev. 1) Paragraphs 4.3.2.2, 4.3.2.3, 4.3.2.4 and 4.3.2.6.1
- MIL-STD-2132D, February 11, 2003, Paragraphs 6.1.3, 6.2.3, 6.2.4, 6.2.5, 6.2.6 and 6.2.7.
- The flash point of the material is over 200° F when tested by the Pensky-Marten's Closed Cup Method (ASTM D-93).
- The vehicle meets the requirements of A-A-59230, July 7, 1998 including Notice 1,2,3,4.
- The vehicle meets the requirements of AMS 2641D, Rev. 2020-10. The vehicle is classified as Type 1 according to paragraph 1.3.

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.

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



Mathew Plamoottil  
Quality Assurance Manager



Laurie Marx  
Quality Control Manager

# 14AM Prepared Magnaglo Bath

Date: 06/25/2024

Purchase Order:

Batch #: 24F02C

We hereby certify that the fluorescent magnetic particle inspection material Type 14AM Prepared Magnaglo , Batch No. 24F02C Manufactured in June, 2024 , furnished on the above order number meets the requirements of BS EN ISO 9934-2:2015 with the following results.

**Organic Carrier Liquid for Magnaglo® 14AM**

| Individual Property            | Section | Requirement   | Result |
|--------------------------------|---------|---|--------|
| Flash Point                    | 7.7     | Report  | 266    |
| Fluorescence of Carrier Liquid | 7.6     | Comparison with reference (Quinine sulphate solution) | PASS   |

**Magnaglo® 14AM**

| Individual Property     | Section | Requirement   | Result  |
|-------------------------|---------|---|---------|
| Performance             | 7.1     | Performance on reference block 1 compared to standard photo.  | EQUAL   |
|                         |         | Determination of lengths of reference block 2   | EQUAL   |
| Colour                  | 7.2     | Comparison with Standard Photo  | equal   |
| Particle Size           | 7.3     | DI (10%)=Report   | 6.0151  |
|                         |         | Da (50%)=Report   | 8.98    |
|                         |         | Du (90%)=Report   | 12.9334 |
| Fluorescent-Coefficient | 7.5     | Shall be within 10% of the type tested value of 2.39  | PASS    |
| Viscosity, Dynamic      | 7.9     | <5 m Pa .s@20C  | 1.82    |
| Storage Stability       | 7.10    | Indications on Reference Blocks 1 and 2 compared to indications from original sample. No discernable changes allowed. | PASS    |
| Storage Stability       | 7.11    | No significant foaming  | NA      |
| Storage Stability       | 7.13    | Expiration date on package  | YES     |



Mathew Plamoottil  
Quality Assurance Manager



Laurie Marx  
Quality Control Manager

# 14AM

Date: 06/25/2024Batch Number: 24F02CManufacture Date: June, 2024

Purchase Order:

We hereby certify that the magnetic particle inspection material, Type 14AM, Batch No. 24F02C, manufactured in June, 2024, furnished on the above order number, meets the requirements of Aerospace Material Specification AMS-3046H, Magnetic Particles, Fluorescent, Wet Method, Oil Vehicle, Aerosol Packaged.

| <u>TEST</u>            | <u>PARAGRAPH</u> | <u>LIMIT</u>   | <u>RESULT</u> |
|------------------------|------------------|--|---------------|
| Magnetic Particles     | 3.1.1            | AMS 3044   | Conforms      |
| Vehicle                | 3.1.2            | AMS 2641   | Conforms      |
| Storage Life           | 3.2              | Meet 3.3   | Conforms      |
| Contamination          | 3.3.1            | No foreign Material Agglomeration, scum  | Conforms      |
| Concentration          | 3.3.2            | 0.15-0.30 cu.cm<br>Magnetic particle/100cc cm  | Conforms      |
| Sensitivity            | 3.3.3.1          | 7 Hole indications shown.<br>Indications sharp, background acceptable.                           | Conforms      |
| Sprayability & Leakage | 3.4.1            | Even spray pattern. No clogging or leakage.  | Conforms      |
| Complete Expulsion     | 3.4.2            | Complete expulsion before exhaustion of propellant. Expelled liquid contents: 5 fl. oz. minimum. | Conforms      |
| Gas Seepage            | 3.4.3            | Shall be not >3cm <sup>3</sup> (3ml)<br>Conforms per 24 hrs.                                     | Conforms      |
| Total Dispensing       | 3.4.4            | Shall be not be less than label mass   | Conforms      |
| Mixability             | 3.4.5            | Pellet present, Completely mixable.  | Conforms      |



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