# Inspection Certificate

**MANUFACTURE DATE:** **05/02/2018**

Abnahme prufzeugnis DIN EN 10204 3.1
Certificat De reception
Certificado di collaudo
Keuringsrapport

**SUBJECT:** **Magnavis 7HF Oil Based Black MPI Ink**

**BATCH No:** **1802108**
**B.B.E.:** **FEB 2023**

We hereby certify that the above Magnetic Particle Inspection Material meets the requirements of Aerospace material specification AMS-3041E, Magnetic Particles, Non Fluorescent, Wet method, Oil vehicle.

| TEST | PARAGRAPH | LIMIT | RESULT |
|---|---|---|---|
| Contamination | 3.3.1 | No foreign material, scum or agglomeration | Conforms |
| Concentration | 3.3.2 | 1.2 - 2.4 ml magnetic particles per 100 ml | Conforms |
| Sensitivity | 3.3.3 | 6 Hole indications shown | Conforms |
| Colour | 3.4 | Black, red or as ordered | Conforms |
| Particle size | 3.5 | Pass 45 µ mesh: 98% Min | Conforms |
| Mechanical Durability | 3.6 | Retain initial sensitivity & colour | Conforms |

We further certify that the above Magnetic Particle Inspection Material meets the requirements of the following specifications:

A. (For Aerosols only) AMS-3043D Paragraphs 3.1, 3.2, 3.3.1 to 3.4.2

B. ASME Boiler and Pressure Vessel Code, Section V, 2004, 2007, 2010, 2013 & 2015 Edition, Nondestructive Examination, article 7, including 2005, 2006, 2008, 2009b & 2011a Addenda, Paragraphs, T731 and Article 25 as applicable.

C. ASTM E 709-15, Paragraphs 8.1.2, 8.2, 8.3, 8.5 & 8.5.3.

D. ASTM E1444/E1444M-16, Paragraphs 5.5.2 and 5.5.3.

E. MIL-STD-2132D, 11 February 2003, Paragraph 6.1.3, 6.2.3, 6.2.4, 6.2.5, 6.2.6, 6.2.7.

F. AMS 2641C Type 1 Oil vehicle. Flash point greater then 93ºC.

We further certify that this material does not contain mercury as a basic element and no mercury bearing equipment was used in its manufacture.

Certification is issued under the auspices of the Quality Assurance Manager.

(Authorised Employee)

For and on behalf of MAGNAFLUX (A DIVISION OF ITW LTD)

***Notes***:

1. Our batch number appears on the label of bulk containers. Aerosols have batch numbers printed on the bottom of the container. Bulk materials have a minimum shelf life of 5 years from date of manufacture. Aerosols have a minimum shelf life of 3 years from date of manufacture.
2. 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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**Specification:** EN ISO 9934-2

When tested at the time of manufacture the following results were obtained:

| **Einzeleigenschaft /** ***Characteristic*** | Ermittlungen nach DIN EN ISO 9934-2 Abschnitt | **Anforderungen /** ***Quality requirement*** | **Ergebnis /** ***Batch testing*** |
|---|---|---|---|
| **Eignung** ***Performance*** | 7.1 | Anzeigefähigkeit auf Vergleichskörper 1 (#072814) Ermittlung der Anzeigenlängen auf Vergleichskörper2 / *Indication on reference block 1 (#072814) Indication length of reference block 2* | sehr gut Gesamtlänge der beiden Anzeigen: 5.0 cm *very good Total length of indication: 5.0 cm* |
| **Farbe/** ***Colour*** | 7.2 | Schwarz Flüssigkeit *Black liquid* | Farbe identisch/ *Colour identical* |
| **Korngröße/** ***Particle size*** | 7.3 | d Ó1,5µm und d Ò40µm | Mittlerer Korndurchmesser 4.6 µm *Average diameter 4.6 µm* |
| **Flammpunkt** ***Flashpoint*** | 7.7 | Als gefunden melden Report as found | Bulk 102°C Aerosol -40°C |
| **Viskosität** ***Viscosity*** | 7.9 | Bei 20°C weniger als 5mPa s *Less than 5mPa s at 20°C* | 3.5 mPa s bei 20°C *3.5 mPa s at 20°C* |
| **Mechanische Stabilität Kurzzeittest** ***Mechanical stability Short term test*** | 7.10 | Keine Abnahme der Empfindlichkeit Nach dem test *No decrease in sensitivity after test* | Anforderungen erfüllt/ *Requirement fulfilled* |
| **Schäumverhalten/** ***Foaming*** | 7.11 | Keine signifikante Schaumbildung/ *No significant foaming* | Anforderungen erfüllt/ *Requirement fulfilled* |
| **Lagerungsbeständigkeit/** ***Storage stability*** | 7.13 | | 5 Jahre/ *5 years* |

Vorstehende Angaben sind die Ergebnisse unserer Qualitätsprüfung. Sie entbinden den Käufer nicht von einer Eingangsprüfung und haben nicht die Bedeutung, die Eignung des Produktes für einen konkreten Einsatzzweck zuzusichern.

*The above 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.*

Certification is issued under the auspices of the Quality Assurance Manager.

(Authorised Employee)

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