

MAGNETIC PARTICLE TESTING MATERIALS



MPI Fluorescent
Materials



MPI Non-Fluorescent
(Visible) Materials



“MAGNAFLUX Magnaglo® fluorescent and Magnavis® visible magnetic particle testing materials provide vivid, superior indications under black light and daylight inspection conditions.”

brilliant



Magnaflux® certified fluorescent and visible magnetic particle inspection materials offer NDT professionals superior detection capabilities in the identification of surface and slightly subsurface discontinuities in ferrous materials under daylight and black light conditions.

Vivid Performance

MAGNAGLO® FLUORESCENT PARTICLE INSPECTION MATERIALS

FLUORESCENT WET METHOD PARTICLES

14A Fluorescent Magnetic Powder

14A is intended for use in high sensitivity, wet method magnetic particle inspection and may be suspended in either a petroleum-based vehicle (oil) such as Carrier II or water.

Specification Compliance: ASTM E 1444, ASME B&PV Code, Sec. V, NAVSEA 250-1500-1, ASTM E-709 (E-138), MIL-STD-271, AMS-3044, Cummins IS-16048-13, MIL-STD-2132, Boeing PS 21201, British Std. B.S. 4069.

Applications: 14A is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks, and fatigue cracks.

Part Number & Container Size:

- 01-0130-71 Case of (6) 1 lb. Jars
- 01-3130-75 20 lb. Plastic Pail



14AM Prepared Oil Bath

14AM is a fluorescent prepared bath of 14A powder mixed with Carrier II (a high flash point petroleum vehicle). It comes ready to use without measuring and mixing.

Specification Compliance: ASTM E 1444, ASTM E 709 (E-138), Cummins IS-16048-13, MIL-STD-2132, Boeing PS 21201, British Std. B.S. 4069, DOD-F-87935, AMS-3045, AMS-3046 (aerosol package only).

Applications: 14AM is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

- 01-0145-40 5 Gal. Pail
- 01-0145-78 Case of (12) Aerosol Cans



MAGNETIC PARTICLE TESTING MATERIALS

Magnaflux Magnaglo® fluorescent and Magnavis® visible magnetic particle testing materials are two of the industry's most widely used and trusted NDT product lines. Their superior, finely controlled particles deliver maximum sensitivity to produce vivid indications that are unmatched in their detection of surface and slightly subsurface discontinuities across a range of ferrous materials. Backed by more than 80 years of magnetic particle experience and an expansive line-up of accessories and equipment, Magnaglo® and Magnavis® products are designed to support your NDT inspection process both in the field and in the shop with the level of performance that only Magnaflux® can provide.

14A Redi-Bath™

14A Redi-Bath is a prepared liquid concentrate of 14A Fluorescent Powder, wetting agents, anti-foaming agents, and long lasting rust inhibitors.

Specification Compliance: ASTM E 1444, ASTM E 709, NAVSEA 250-1500-1, MIL-STD-271, MIL-STD-2132, ASME B & PV Code, Sec. V.

Applications: 14A Redi-Bath is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

01-9130-35 Case of (4) 1 Gal. Jugs

01-9130-41 Case of (6) 27 oz. Containers



14A Aqua-Glo

14A Aqua-Glo is a prepared liquid solution of 14A Fluorescent Powder, water, conditioning agents, corrosion inhibitors and carbon dioxide propellant. It is designed to offer the benefits of a water bath in a convenient ready to use aerosol form. 14A Aqua-Glo is ideally suited for applications where portability is required, and flammability is a concern.

Specification Compliance: ASTM E 1444, ASTM E 709, NAVSEA 250-1500-1, ASME.

Applications: 14A Aqua-Glo is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

01-1725-38 Case of (12) Aerosol Cans



20B

20B is a dry mix formula of 14A Fluorescent Powder and WA-2B water conditioner containing wetting agents and corrosion inhibitors designed to be added to a water bath.

Specification Compliance: ASTM E 1444, ASTM E 709 (E-138), NAVSEA 250-1500-1, MIL-STD-271, MIL-STD-2132, ASME B & PV Code, Sec. V.

Applications: 20B is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

01-0179-71 Case of (6) 1 lb. Jars

01-0179-70 15 lb. Pail

01-0179-84 30 lb. Pail





MG-410 Wet Method Fluorescent Magnetic Powder

MG-410 Wet Method Fluorescent Magnetic Powder is a dry, free flowing magnetic powder that fluoresces bright yellow-green under black light (wavelength of 365 nm). Its fluorescent yellow-green color provides a vivid contrast against metal parts when viewed under black light in a darkened area but does not require total darkness for viewing.

MG-410 is closely controlled to assure optimum batch to batch consistency and inspection reliability and can be used with either water or oil vehicles.

Specification Compliance: ASME B & PV Code, Sec. V, NAVSEA 250-1500-1, MIL-STD-2132, ASTM E 709, NAVSEA T9074-AS-GIB-010/271.

Applications: MG-410 is used for general purpose wet method magnetic particle inspection of inclusions, seams, cracks, tears, laps, flakes and welding defects.

Part Number & Container Size:

01-0191-73 Case of (6) 2 lb. Jars



OIL VEHICLE

Carrier II Oil

Carrier II Oil is used to suspend wet (oil) method magnetic particles when water is not used as a suspension vehicle. It has virtually no odor or fluorescence and possesses a flash point in excess of 200°F allowing it to meet OSHA requirements for a Class III B liquid.

Specification Compliance: ASTM E 1444, ASTM E 709, Pratt & Whitney PMC 1887, A-A-59230, ASME B & PV Code, Sec. V, AMS-2641.

Part Number & Container Size:

01-2122-40 5 Gal. Pail

01-2122-30 20 Gal. Drum

01-2122-45 55 Gal. Drum



WATER BATH ADDITIVES

AX-52 Corrosion Inhibitor

AX-52 is a pale yellow to amber colored liquid corrosion inhibitor that mixes in and quickly dissolves in the water bath. It is an outstanding corrosion inhibitor for wet method magnetic particle inspection.

Part Number & Container Size:

01-2190-40 5 Gal. Jug



WA-2B Water Conditioner

WA-2B is a white granular powder water conditioner used in wet method magnetic particle testing when water is used as the bath vehicle. It is an excellent general-purpose water conditioner that gives a water bath good surface wetting and magnetic particle dispersion capabilities, along with a blend of wetting agents, corrosion inhibitors and anti foaming agents.

Part Number & Container Size:

01-2148-63 5 lb. Pail



WC-1 Water Conditioner

WC-1 is used in wet method magnetic particle testing when water is used as the bath vehicle. It is more rapidly dispersed than powdered conditioners and its unique blend of wetting agents, corrosion inhibitors and anti foaming agents eliminates the need for additional water conditioners. WC-1 provides good surface wetting and magnetic particle dispersion capabilities.

Part Number & Container Size:

01-2173-40 5 Gal. Pail



ZAF-2 Non-Silicone Anti-Foam

ZAF-2 Non-Silicone Anti-Foam is a clear, colorless liquid used to eliminate foaming in aqueous developer baths, water based magnetic particle baths and hydrophilic remover baths. A few drops of ZAF-2 sprinkled around on the surface of a bath is all that is required to eliminate most foaming.

Part Number & Container Size:

01-9410-20 1 Gal. Plastic Bottle



PORTABLE FLUORESCENT INSPECTION KIT

Magnaglo Portable Fluorescent Inspection Kit

The Magnaglo Portable Fluorescent Inspection Kit comes with a ZB-100F Ultraviolet Black Light and materials used to perform magnetic particle inspection. (No magnetic yoke is included with kit.)

Part Number:

600088 - Magnaglo Kit with 115V - 60 Hz ZB-100F Black Light

Each kit contains:*

- (1) ZB-100F Fan-Cooled Ultraviolet Black Light
- (2) Cans of 14AM Aerosol
- (2) Cans of SKC-S Aerosol
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case and Instructions

*Note: No magnetizing device is supplied with this kit.





VISIBLE PARTICLE INSPECTION MATERIALS

VISIBLE WET METHOD PARTICLES

7C Black Visible Wet Method Dry Powder Concentrate

7C Black Visible Wet Method Dry Powder Concentrate is ideally suited for use on light colored surfaces where optimum color contrast is needed. 7C is composed of compounded magnetic powder and may be suspended in either Carrier II Oil Vehicle or in water.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709 (E-138), ASTM E 1444, AMS 3042, MIL-STD-271, MIL-STD-2132, NAVSEA 250-1500-1.

Applications: 7C Black Visible Wet Method Dry Powder Concentrate is used to locate inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

01-1116-66 8 lb. Pail



7HF Black Visible Magnetic Particle Wet Method Prepared Bath

7HF Black Visible Magnetic Particle Wet Method Prepared Bath is designed for spot inspections of parts that, because of their size or location, must be inspected in the field.

7HF is composed of 7C Black magnetic powder suspended in a low volatility mineral oil. It offers significant advantages in situations where bulk processing is found to be impractical and is often used in combination with WCP-2 White Contrast Paint.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709, ASTM E 1444, AMS 3041, AMS 3043, Boeing PS-21201, MIL-STD-2132.

Applications: 7HF is ideal for remote inspection of tubes, piping, and other large structures.

Part Number & Container Size:

01-1580-78 Case of (12) Aerosol Cans



WHITE CONTRAST PAINT

WCP-2 Contrast Paint

WCP-2 Contrast Paint provides a white background that enhances magnetic particle indications. It is composed of acetone and inorganic pigments and utilizes a carbon dioxide aerosol propellant for ease of application.

Specification Compliance: BS 5044.

Applications: WCP-2 is designed for use in applications where the contrast in color between the part being tested and the magnetic particles being used is insufficient for reliable identification of flaws. WCP-2 can be used with both dry and wet-method magnetic particles.

Part Number & Container Size:

01-2250-78 Case of (12) Aerosol Cans



VISIBLE DRY METHOD PRODUCTS

Dry Method Non-Fluorescent Magnetic Powders

Dry Method Non-Fluorescent Magnetic Powders produce clear, sharp indications across a variety of surfaces and background colors. Available in 1 Gray, 2 Yellow, 3A Black and 8A Red, magnetic powders are ready to use, free flowing, general purpose powders designed to produce, superior indications of surface and slightly subsurface discontinuities in ferrous materials.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709, NAVSEA 250-1500-1, NAVSEA T9074-AS-GIB-010/271, MIL-STD-2132, AMS-3040.

Applications: Dry Method Non-Fluorescent Magnetic Powders are used to identify indications in welds, large forgings and castings.

Part Number & Container Size:

- 01-1716-69 1 Gray Magnetic Powder - 10 lb. Pail
- 01-1716-87 1 Gray Magnetic Powder - 45 lb. Pail
- 01-1732-69 2 Yellow Magnetic Powder - 10 lb. Pail
- 01-1732-87 2 Yellow Magnetic Powder - 45 lb. Pail
- 01-1748-87 3A Black Magnetic Powder - 45 lb. Pail
- 01-1780-69 8A Red Magnetic Powder - 10 lb. Pail
- 01-1780-87 8A Red Magnetic Powder - 45 lb. Pail





SPECIFICATIONS

MAGNAGLO MAGNETIC PARTICLES

Magnaglo Fluorescent Wet Method Magnetic Particles									
SPECIFICATIONS	14A	14AM	14 Aqua-Glo	14A Redi-Bath	20B	MG-410	7C Black	7HF	Carrier II
NAVSEA T9074-AS-GIB-010/271	X		X	X	X	X	X	X	X
MIL-STD-2132	X	X	X	X	X	X	X	X	X
AMS 2641									X
AMD 3041								X	
AMS 3042							X		
AMS 3043								X	
AMS 3044	X		X	X	X				
AMS 305		X							
AMS 3046		X							
ASME B & PV Code, Sec. V	X	X	X	X	X	X	X	X	X
ASTM E 709	X	X	X	X	X	X	X	X	X
ASTM E 1444	X	X	X	X	X		X	X	X
A-A-59230		X							X
Boeing PS-21201	X	X	X	X	X		X	X	X
NAVSEA 250-1500-1	X		X	X	X	X	X		
Pratt & Whitney PMC 1887									X

MAGNAVIS MAGNETIC PARTICLES

Magnavis Visible Dry Method Magnetic Particles				
SPECIFICATIONS	1 Gray	2 Yellow	8A Red	3A Black
NAVSEA T9074-AS-GIB-010/271	X	X	X	X
MIL-STD-2132	X	X	X	X
NAVESEA 250 -1500-1	X	X	X	X
AMS 3040	X	X	X	X
ASME B & PV Code, Sec. V	X	X	X	X
ASTM E 709	X	X	X	X
ASTM E 1444	X	X	X	X