

TECHNICAL DATA SHEET

F-MAG

Code 1566

Fluorescent Magnetic Particle

DESCRIPTION

CalCheck F-MAG is fluorescent magnetic oxide suspended in a highly refined light petroleum distillate. The suspension responds to magnetic leakage fields created by discontinuities in ferromagnetic material. Particles rapidly collect at leakage fields producing fluorescent indications under ultraviolet light.

FEATURES & BENEFITS

- Low background colour for high contrast indication visibility
- Particles are easily agitated and fast acting, producing defined indications quickly and accurately.
- Greater convenience and portability in aerosol form.
- Can be used with both stationary and portable magnetic test equipment.

DIRECTIONS FOR USE

Note: These instructions describe the basic process, but they may need to be amended by the user to comply with applicable specifications and/or inspection criteria provided by the contracting agency.

1. Clean the test surface and allow it to dry.
2. The longer F-MAG is stirred or agitated the more uniform the spray.
3. Apply a liberal coating of F-MAG to the inspection area so that there is sufficient magnetic particle to flow over the area.
4. Allow the excess fluid to run off the inspection area.
5. Inspect the surface under ultra-violet light.
6. Collections of fluorescent magnetic particles will reveal discontinuities at the leakage fields.
7. Clean and repeat the process, changing the orientation of the magnetising direction.

PHYSICAL PROPERTIES

| | |
|------------------------|---|
| Colour | Brown |
| Fluorescent | Yellow/ Green |
| Particle Concentration | Bulk = 0.1ml – 0.4ml, Aerosol = 0.15ml – 0.3ml |
| Particle Size | 2.0 – 5.0 µm with an average size of 3.0 µm |
| SAE Sensitivity | 7 holes |
| Suspension Fluid | Clear highly refined light petroleum distillate |



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Viscosity <3cSt \pm 5% (ASTM D445 @ 38°C (100°F))
Flash Point >93°C (>200°F)

ORDERING INFORMATION

| Product Code | Packaging |
|--------------|-----------|
| 1566/400 | Aerosol |

SPECIFICATION AND COMPLIANCES

- ASME Boiler and Pressure Vessel Code Section V
- AMS 2641
- AMS 3044
- AMS 3045
- AMS 3046
- ASTM E1444
- ASTM E3024
- ASTM E709
- ISO 9934-2

DANGER

Extremely flammable aerosol. Pressurized container: may burst if heated. May be fatal if swallowed and enters airways.

PRECAUTION

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

FIRST AID

IF SWALLOWED: Immediately call a POISON CENTRE or Doctor. Do NOT induce vomiting.

STORAGE

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Dispose of contents/container in accordance with any local regulation.

BATCH NUMBERS

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Batch numbers can be found on the bottom of aerosol cans or labels of bulk containers. Certificate of Conformance documents are provided with the product or can be download from

www.callington.com

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