

TECHNICAL DATA SHEET

DUBL-CHEK MPF

Magnetic Particle Fluid

Code 1491

DESCRIPTION

DUBL-CHEK MPF is highly refined light petroleum oil media. The fluid has been formulated to increase the particle agitation when mixed in suspensions with Black Oxide No.1 or GW-1. To be used in the Magnetic Particle inspection wet method, it has high clarity, no fluorescence or odour.

FEATURES & BENEFITS

- Has a flash point over 93°C
- No odour, no fluorescence, and no yellow colour
- Low background for assured indication visibility

PHYSICAL PROPERTIES

Colour:	Clear
Viscosity:	2.64 cSt ± 5% (ASTM D445 @ 37.8°C±1°C)
Fluorescence:	None
Boiling Point:	232°C (450°F)
Flash Point:	98°C (210°F)
Specific Gravity:	0.81g/ml

ORDERING INFORMATION

Product Code	Packaging
1491/42	3.8 litres (1 gallon)
1491/51	18.9 liters (5 gallons)
1491/51	18.9 liters (55 gallons)

SPECIFICATION COMPLIANCE

- SAE AMS 2641
- DOD F-87935
- Pratt & Whitney
- ASME B & P Code Sections

COMPANION DUBL-CHEK PRODUCTS

- Black Oxide No.1 Particles
- CP-2 Contrast Paint
- GW-1 Fluorescent Particles
- MPF Magnetic Particle Fluid
- W5C Water Conditioner



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BATCH NUMBERS

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

DIRECTIONS

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.

Refer to Black Oxide No.1 and GW-1 Technical Data Sheets for mixing instructions.

1. Clean the test surface and allow it to dry.
2. Apply DUBL-CHEK CP-2 for background contrast, if required.
3. Fill the magnetic particle tank or container to the proper level with MPF and start to agitate the fluid. Add the pre-measured amount of magnetic particles to the agitated fluid. The mixture should be agitated for 15 minutes before measuring the concentration.
4. Ensure continuous agitation of the suspension during inspection.
5. Magnetise the area to be inspected.
6. Apply the suspension to the test part at a distance of approximately 150mm from the surface.
7. Allow the excess oil to run off the inspection area.
8. Inspect the surface under visible or ultraviolet light.
9. Collections of particles will reveal discontinuities at the leakage fields.
10. Clean and repeat the process; changing the orientation of the magnetising direction.

STORAGE/SHELF LIFE

Keep away from moisture and sunlight. Keep the container closed when not in use. Temperature limit: 0°C to 50°C (40°F-125°F). Shelf life: 36 months (3 years) from date of manufacture. Refer to NDT Shelf Life and Storage Recommendations for further information.

HEALTH & SAFETY

Use with adequate ventilation and away from spark, fire or open flames. Avoid prolonged or repeated contact with skin. Do not breathe gas, fumes, vapour or spray. Consult the MSDS for more Safety and Health information.

Get medical attention if irritation develops and persists. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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