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Technical Bulletin 279
Mi-Glow® 820S-RTU

Mi-Glow® 820S-RTU is a Ready-to-Use water bath packaged in a hand-held spray bottle. The water bath contains Mi-Glow® 106 black particles and liquid Wetting Agent 771. It is designed to be used with visible light for revealing discontinuities on machined component parts.

Properties

Particle Color: Black

Concentration: 9.5 g/l

Particle Size: Not less than 98% passage through US Standard No. 325 (45 µm) sieve as defined in AMS 3042. The typical range of particle sizes is from 0.5 to 4.0 µm, with an average particle size of 1.5 µm.

Sensitivity: Mi-Glow® 820S RTU shows a minimum of 6 lines on an AISI 01 Ketos tool steel ring (as defined in SAE AS5282), set on a 1-inch diameter copper bar, magnetized with 2500 A of direct current.

Particle Certification: Particles meet or exceed all relevant industry specifications, including but not limited to MIL-STD-1949, AMS 3042, MIL-STD-271, NAVSEA 250-1500-1, NTR-1E, ASTM E 1444. Certification is included with each shipment.

Temperature Limits: 32-120°F (0-49°C)

Shelf Life: Five (5) years, when sealed bottles are not subjected to excessive heat or cold. A Certificate of Shelf Life is available upon request.

Directions for Use

Preparation: Thoroughly shake the bottle, insert the spray nozzle and apply to the parts for inspection.

Lighting: A minimum of 100 foot candles (1000 lux) of visible light at the part surface per ASTM E 709 and ASTM E 1444 is recommended.

Concentration Test: If it becomes necessary to verify the concentration in the bottle, thoroughly shake the bottle and the method of test should be as follows:

1. Fill a 100 ml graduated centrifuge tube as specified in Guide E709, or equivalent, to the 100 ml mark with suspension directly from the bottle. Demagnetize the suspension, if considered necessary, and let it stand undisturbed for a minimum of 60 minutes or until completely settled.
2. Read the volume of the precipitate in the graduate. The recommended volume is between 1.2 to 2.4 ml.
