 <p>15 Rue des Frères Lumière – BP 136 78374 PLAISIR FRANCE Pho : +33(0)1.30.80.81.98 Fax : +33(0)1.30.80.81.99 WEB : www.babbco.fr E-MAIL : sherwinbabbco@orange.fr</p>	<p><b>TECHNICAL DATA SHEET</b></p>	<p>Ref : TDS/HM406</p> <p>Page : 1/3</p> <p>Rev : 4 Date : 12/09</p>
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## FLUORESCENT PENETRANT HM406



**MANUFACTURER: SHERWIN (USA) / NDT-Europa (NL)**

**DESCRIPTION / APPLICATION(S):**

Type 1, method A, level 2, according AMS 2644 and ISO 3452-2, water washable fluorescent penetrant designed for detecting surface defects. (sensitivity medium / high)


**.Associated products :** DR-60, DR-62 removers  
N 120 cleaner/ N 106 A  
D-100, D-90G, D-106, R60 developer

**SPECIFICATIONS / STANDARDS:**

- Conform to code : ASME  
standards : ISO 3452-2  
specifications: GENERAL ELECTRIC  
PRATT & WHITNEY (high sensitivity)  
ALLISON  
MTU  
BOEING, LOCKHEED: in accordance with QPL  
ROLLS-ROYCE (OMAT : 653F)  
EADS
- Homologation : QPL-AMS 2644

**PHYSICO-CHEMICAL PROPERTIES:**

- Aspect: green liquid
- Fluorescence: green-yellow
- Flash point: > 93° C.

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- Viscosity: 5,7 mm<sup>2</sup>/s ± 15% at 40°C
- Very low halogen and sulfur content
- Compatible with all metals and certain plastics.

**PACKAGING / SHIPPING / STORAGE:**

- . **Packaging:** 1-, 5-, 10-, 25-liter canisters  
60-liter drum / 200-liter drum
- . **Shipping / Handling:** refer to MSDS
- . **Storage / Shelflife:** keep away from moisture and daylight  
Temperature limit : 0 to 50°C  
Keep the packaging closed after taking out some of the product  
Canister/Drum: >48 months

**INSTRUCTIONS** : (These 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. Application :**

Apply HM-406 only to clean, dry surfaces by spraying, flowing, brushing or dipping.

**2. Dwell-Time :**

A 10 minute dwell time is suggested, although in many cases five minutes will suffice. When particularly tight cracks are suspected, or the part is especially critical, the dwell time may be extended to 30 minutes, or longer.

**Do not soak the part.** To increase sensitivity, as well as conserve material, allow the penetrant to drain from the part surface back into the penetrant tank.

**3. Removal :**


Use a quick, ambient temperature water wash at tap pressure to rinse HM-406 from the part surface. To avoid washing entrapped penetrant from surface flaws, do not use high water pressures and temperatures, or prolonged washing and scrubbing.

**4. Drying :**

A recirculating oven set no higher than 160°F (71°C) is suggested. Leave part in oven just long enough to evaporate surface moisture. Drying is improved by using pressurized air to disperse and remove as much excess water as possible before placing part in oven.

**5. Developing :**

HM-406 is self developing. Nevertheless it is recommended to use a developer as listed above.

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**6. Inspection :**

Inspect parts under appropriate UV-A radiation and dimmed visible light, in accordance with ISO 3059.

**HEALTH AND SAFETY:** refer to MSDS.

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