



HM-3A FLUORESCENT PENETRANT

Technical Data Sheet

Approvals and conformities

ALLISON ENGINES
BOEING
CFM INTERNATIONAL
DASSAULT AVIATION
EADS
EDF (PMUC : Produits et Matériels Utilisables en Centrale)
GE
ISO 3452-2
LOCKHEED MARTIN
PRATT & WHITNEY
QPD-AMS 2644
RCC-M
ROLLS ROYCE
SAFRAN

MANUFACTURER: SHERWIN Inc. (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)

Companion products: N120, DR-62 cleaner/ N106A, DR-60 remover

D-100, D-90G, D-106, R60 developer

DIRECTIONS FOR USE

These describe the basic process, but they may need to be amended by the user to comply with

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applicable specifications and/or inspection criteria provided by the contracting agency.

Application:

Apply HM-3A only to clean, dry surfaces by spraying, flowing, brushing or dipping.

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.

Removal:

Use a quick, ambient temperature water wash at tap pressure to rinse HM-3A 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.

Drying:

A recirculating oven set no higher than 80°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.

Developing:

HM-3A is self-developing. Nevertheless it is recommended to use a developer as listed above.

Inspection:

Inspect parts under appropriate UV-A radiation (mini 1000 µW/cm² and if possible higher or equal to 1500 µW/cm²) and dimmed visible light (< 20lux), in accordance with ISO 3059.

TECHNICAL CHARACTERISTICS

- Very low halogen and sulphur content
- Compatible with all metals and certain plastics.

Appearance green liquid
Fluorescence green-yellow
Flash point > 93°C
Viscosity 6,6 mm²/s ± 10% at 40°C

PRECAUTIONS FOR USE AND STORAGE

Transport / Handling: Refer to Material Safety Data Sheet (MSDS).

Storage : Keep away from moisture

Temperature range: 0°C à 50°C

Keep packaging closed after taking out some of the product.

This technical data sheet replaces and cancels the previous one.

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