

**Approvals and conformities**

ASME  
ISO 3452-2  
DASSAULT AVIATION  
EADS  
SAFRAN  
ROLLS ROYCE  
PRATT & WHITNEY  
QPD-AMS 2644

**MANUFACTURER : SHERWIN Inc (US) / NDT Europa (NL)**

**DESCRIPTION / APPLICATION(S) :**

Post-emulsifiable high sensitivity fluorescent penetrant designed for inspection of critical parts, turbines blades, assemblies, welds.  
Type I, method B, C, D, level 3 according AMS 2644 and level 4 according ISO 3452-2.

**Companion products :** Lipophilic emulsifier ER 85  
Hydrophilic emulsifier ER-83A, ER-83B, ER-83C  
Developer D-90G, D-100, D-106, R60

***DIRECTIONS FOR USE***

Parts cleaning : use appropriate process/products as per applicable specifications

**Application :**

By spraying (electrostatic, pneumatic, aerosol), using a brush, or by immersion.

**Dwell time :**

10 to 30 minutes, depending on applicable specs. If dipping is used, allow the penetrant to drain from the part surface back to the penetrant tank.

**Removal :**

Two separate procedures apply:

- with pre-wash
- without pre-wash

**Pre-wash :**

RC-65 -> Pre-wash -> Hydrophilic emulsifier -> Rinsing -> Drying -> Developer

**Conventional post-emulsion method diagram :**

RC-65 -> Hydrophilic or lipophilic emulsifier -> Rinsing -> Drying -> Developer

The first process will save considerable quantities of emulsifier.

The emulsifier is applied by immersion or by spraying (see technical datasheet ER-83A, ER-83B, ER-83C or ER-85).

**Rinsing off :**

Use coarse plain water spray to remove all traces of emulsified penetrant Air + water spray gun is a good alternative.

Washing is carried out under UV-A radiation, so as to ensure that no fluorescent background is left.

**Drying :**

A circulating oven (60 to 80°C ; 140°F to 176°F) is suggested; do not use compressed air. Infrared lamps and/or air guns are not advisable.

**Development :**

Although RC 65 is self-developing, using a developer enhances indications.

**Inspection :**

Inspect parts under appropriate UV-A lighting (mini 1000 µW/cm², if possible > 1500 µW/cm²) and dimmed visible light (less than 20 lux).

**TECHNICAL CHARACTERISTICS**

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Very low halogen and sulfur content

Compatible with all metals, ceramics, and certain synthetic substances.

Appearance . . . . .	green liquid
Fluorescence . . . . .	green-yellow
Flash point . . . . .	> 93°C
Viscosity . . . . .	5.7 mm²/s± 10 % at 38°C

**PRECAUTIONS FOR USE AND STORAGE**

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**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

1 Date : 03-07-2017 Written and checked by : F. Héron

**This technical data sheet replaces and cancels the previous one.**

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