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## TECHNICAL DATA SHEET

Ref: RC 65

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Rev: 1 Date: 05/05



**MANUFACTURER : SHERWIN (USA)/NDT Europa (NL)**  
**DISTRIBUTOR: NDT Consultants Limited (UK)**

**DESCRIPTION / APPLICATIONS:**

Post-emulsifiable high sensitivity fluorescent penetrant designed for inspection of critical parts, turbines blades, assemblies, welds.

**COMPANION PRODUCTS:**

ER 83 A hydrophilic emulsifier  
ER 85 lipophilic emulsifier  
D90G, D 100 developers

**SPECIFICATIONS / STANDARDS:**

AMS 2644-QPL-1-listed  
Type 1 method B, C, D, level III  
GENERAL ELECTRIC: D, E, F, G  
PRATT & WHITNEY: FPM high sensitivity (code 2)  
ALLISON: level 3  
MTU: 83/296  
AIRBUS-EADS: Type I, method B and D, level III  
ROLLS ROYCE: RPS 702-F2B TSD 594-op 210 medium  
SNECMA: sensitivity S3  
DASSAULT: type I, method B, level III

**PHYSICO-CHEMICAL PROPERTIES:**

Aspect: green liquid  
Fluorescence: green-yellow  
Flash point: > 93°C  
Viscosity: 5.7 mm<sup>2</sup>/s± 10 % at 38°C  
-Very low halogen and sulfur content  
-Compatible with all metals, ceramics, and certain synthetic substances.

**PACKAGING / SHIPPING / STORAGE:**

Packaging:

1-, 5-, and 10-liter canisters.  
60-liter drum.  
200-liter drum.  
300-ml spray can.

Shipping / Handling: refer to MSDS

Storage:

Keep away from moisture  
Temperature limit : 0 to 50° C.  
Keep packaging closed after taking out some of the product.  
Shelflife:

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Canister / drum: 48 months.  
Spray can: 48 months.

### **INSTRUCTIONS:**

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 83 A 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 and dimmed visible light, in accordance with ISO 3059.2001 standard.

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

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