

### Approvals and conformities

ASME  
ISO 3452-2  
QPD-AMS 2644

**MANUFACTURER: SHERWIN Inc (USA) / NDT-EUROPA (NL)**

### DESCRIPTION / APPLICATION(S):

ER85 emulsifier is used in the inspection penetrant process to remove excess surface penetrant where method B, lipophilic emulsifier method, is required, according AMS 2644 and ISO 3452-2.

There is no "pre-wash" with this method, and the emulsifier is used full strength.

**Companion products:** RC-29, RC-50, RC-55, RC-65, RC-77, RC-88, DP-40

### DIRECTIONS FOR USE

**ER-85** works by mixing with thin layer of excess penetrant which remain on a part's surface following the penetrant dwell and drain cycle. The emulsifier-penetrant mixture is then washed from the surface by a coarse, plain-water spray. The objective is to remove excess surface penetrant as completely as possible in order to minimize background fluorescence without disturbing flaw-entrapped penetrant.

#### Application:

Apply ER-85 by dipping, spraying or flowing the product over the surface which has been drained as completely as possible of excess penetrant. Allow excess ER-85 to drain back to the tank.

#### Allow to Stand:

The ER-85 must stand on the part surface and mix with the excess penetrant layer for measured time period sufficient for it to mix with and provide water washable properties to excess surface penetrant. Rough surface require longer emulsifier dwell times than smooth surface.

#### Plain-Water Spray:

To remove the emulsifier-penetrant mixture spray the part at an angle with plain, ambient temperature water. Do not use hot water. A coarse spray of 30-40 psi is preferred. If possible perform this operation under UVA

light to insure against over washing.

**Drying:**

After the spray cycle, completely dry the part.

**NOTES:**

Being slow to diffuse with penetrant until the penetrant-emulsifier is sprayed with water, ER- 85 minimizes the risk of over-emulsification. ER-85 **is superior to the other lipophilic emulsifiers in this regard.**

***TECHNICAL CHARACTERISTICS***

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Very low halogen and sulfur content.

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

Appearance ..... viscous pinkish liquid

Flash point ..... > 93°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.

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

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1 Date : 06-07-2017 Written and checked by : F. Héron