

### TECHNICAL DATA SHEET

# DUBL-CHEK ER-85

## Method B Emulsifier

Code 1535

#### DESCRIPTION

ER-85 is a lipophilic emulsifier used in the inspection penetrant process to remove excess surface penetrant. ER-85 is a Method B emulsifier. It does not require a pre-wash step and is used at full strength. It meets the requirements for low sulphur, low halogen, and low sodium.

#### FEATURES & BENEFITS

- Low to near zero background for assured indication visibility
- Long material tank life due to formula stability and non-volatility
- Minimizes the risk of over – emulsification
- Clean, odorless product, vapor free atmosphere

#### PHYSICAL PROPERTIES

Colour: Pinkish  
 Viscosity: 22.0  
 Flash Point: > 230°F (110°C)  
 Water Content: <0.5%



#### SPECIFICATION COMPLIANCE

- SAE AMS 2644 QPL – Method D Remover
- MIL-I-25135 Revisions C, D & E
- Lockheed Martin
- Rolls Royce
- Turbomeca
- Airbus
- General Electric
- ASME Code NDT, Sec V
- Boeing
- Honeywell
- Northrup Grumman

#### ORDERING INFORMATION

Product Code	Packaging
1535/42	3.8 litres (1 gallon)
1535/51	18.9 litres (5 gallons)
1535/64	208 litres (55 gallons)

#### BATCH NUMBERS

Batch numbers can be found on the bottom of aerosol cans or labels of bulk containers. Certificate of Conformance documents are provided with the product or can be download from [www.callington.com](http://www.callington.com)

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### DIRECTIONS

**Note:** These instructions describe the basic process, but they may need to be amended by the user to comply with applicable specification and/or inspection criteria provided by the contracting agency.

- 1. Application:** Apply non-water washable penetrant 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. Allow the penetrant to drain from the part surface back into the penetrant tank to conserve material.
- 3. Removal:** Use the appropriate washing method to remove the excess penetrant from the surface
  - a. Emulsification:** Following the dwell, dip the part into undiluted lipophilic emulsifier. Remove the part and allow the excess emulsifier to drain back into the tank. Parts with rough surfaces require longer drain times.
  - b. Rinse:** Use a coarse plain water spray to remove all traces of the emulsified penetrant.
- 4. Drying:** A re-circulating oven set no higher than 160F (71C) is suggested. Leave the part in the 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 the part into the oven. Drying is improved by using pressurized air to disperse and remove as much excess water as possible before placing the part into the oven.
- 5. Developing:** Apply the developer by cloud, dusting, spray or dip using the appropriate developer. Flaw marks are visible under appropriate lighting almost immediately but allow sufficient developing time to enhance the flaw visibility.
- 6. Inspection:** Inspect parts under appropriate light.

### STORAGE/SHELF LIFE

- Keep away from moisture and sunlight
- Temperature limit: 400F to 125°F (0-50°C)
- Keep the container closed when not in use
- Shelf life from invoice date: Bulk Container – 36 months

### HEALTH & SAFETY

ER-85 is a combustible liquid. Use with adequate ventilation and away from sparks, fire or open flames. Avoid prolonged or repeated contact with skin. Do not take internally. Consult the MSDS for more safety and health information.

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Created 11<sup>th</sup> September 2020 Date Printed 16/02/2023 5:10 PM