

TECHNICAL DATA SHEET

DUBL-CHEK D-100

Non-Aqueous Developer

Code 1488

DESCRIPTION

DUBL-CHEK D-100 developer consists of refined white particles suspended in isopropyl alcohol that produces enhanced sensitivity for locating tight flaws. D-100 developer pulls flaw-entrapped penetrant to the part surface and creates a contrasting vivid white background. Complies with low sulfur and low halogen requirements.

FEATURES & BENEFITS

- Lays on the surface in a thinner, more uniform, more absorbent coating
- Has superior suspension properties
- It is easily removed by light brushing or spray water rinse
- Works well on smooth or rough surfaces
- Can be used on machined or coated surfaces
- Can be used with both visible and fluorescent penetrants

PHYSICAL PROPERTIES

Colour: White Suspended Particles
Flash Point: 11.7°C
Boiling Point: 82°C
Specific Gravity: 0.79

SPECIFICATION COMPLIANCE

- SAE AMS 2644
- QPL-AMS-2644 listing
- MIL-I-25135 Revisions C, D & E
- ASME Code NDT, Sec V

COMPANION DUBL-CHEK PRODUCTS

- D-110A Water Suspendable Developer
- D-100 Non-Aqueous Developer
- D-106 Non-Aqueous Developer
- DR-60 Solvent Remover
- DR-64 Solvent Remover

ORDERING INFORMATION

Product Code	Packaging
1488/400	400ml (Aerosol)
1488/42	3.8 litres (1 gallon)
1488/51	18.9 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 downloaded from www.callington.com



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STORAGE/SHELF LIFE

Keep away from moisture and sunlight. Keep the container closed when not in use. Temperature limit: 4°C to 50°C (40°F to 125°F). Shelf life: 36 months (3 years) from date of fill / manufacture. Refer to NDT Shelf Life and Storage Recommendations

DIRECTIONS

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

1. **Application:** Apply 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.
4. **Drying:**
 - a. A re-circulating oven set no higher than 71°C is suggested. Leave the part in the oven just long enough to evaporate surface moisture. Drying is improved by using pressurised air to disperse and remove as much excess water as possible before placing the part into the oven
 - b. When solvent remover is used, allow the surface to dry completely before applying developer.
5. **Developing:** After agitating the D-100 suspension, evenly spray a light slightly wet coating of developer onto the dry surface of a part. An overly wet application will blur indications; an overly dry application lacks full developing action. Two or three light applications work better than a single heavy application. Too heavy an application may conceal indications. If D-100 is to be applied with a paint spray gun, the spray gun should have a vaporising tip, the spray tank should be pressurised to 15-30 pounds of pressure and have a stirrer to keep the powder in suspension.
6. **Inspection:** Inspect parts under appropriate light.

HEALTH & SAFETY

DUBL-CHEK D-100 is flammable and when packaged within an aerosol is extremely flammable. Use with adequate ventilation and away from spark, fire or open flames. Avoid prolonged or repeated contact with skin. Do not breathe gas, fumes, vapour or spray. Consult the MSDS for more Safety and Health information. Get medical attention if irritation develops and persists. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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