

TECHNICAL DATA SHEET

DUBL-CHEK DP-50

Code 1492

Solvent Removable Visible Penetrant

DESCRIPTION

DUBL-CHEK DP-50 is a water washable and solvent removable visible penetrant used to locate cracks, laps, pores, lack of bonding, and similar surface flaws. DP-50 can be used on nonporous parts including both ferrous and nonferrous metals, ceramics, glass and some plastics.

FEATURES & BENEFITS

- Brings flaws into sharper, clearer focus with more intense colour
- Performs more reliably over a greater range of temperatures
- DP-50 meets stringent low sulfur and chloride requirements
- Long lasting flaw mark indications; less fading
- Water washable; easy to remove

PHYSICAL PROPERTIES

Colour: Red
 Odour: Low petroleum smell
 Viscosity: 7.07 cSt @ 37°C
 Flash Point: 104°C
 Boiling Point: 148°C

SPECIFICATION COMPLIANCE

- SAE AMS 2644
- QPL-AMS-2644 Listing
- MIL-I-25135 Revisions C, D, E
- ASME Code NDT, Sec V AS 2062
- NATO Stock Number: 6850-01-265-7233

ORDERING INFORMATION

Product Code	Packaging
1492/400	Aerosol
1492/42	3.8 liters (1 gallon)
1492/51	18.9 liters (5 gallons)
1492/64	208 liters (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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DIRECTIONS

1. **Application:** Apply DP-50 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:**
 - a. **Water Wash Method:** Use ambient temperature water to rinse DP-50 from the part surface. To avoid washing entrapped penetrant from surface flaws do not use high water pressure temperatures and avoid prolonged washing times.
 - b. **Solvent Wipe Method:** Remove as much excess penetrant as possible using a clean, lint free dry rag or towelling. Remove remaining penetrant film by wiping with a rag or towelling that has been slightly moistened with solvent. Use a minimum of solvent; avoid flushing penetrant from flaws. Do not spray solvent directly on the part surface when removing excess penetrant. Rough surfaces require more generous application of solvent.
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:** Apply the developer by spray or dip using the appropriate developer. Flaw marks are visible under black light 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. 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.

HEALTH & SAFETY

DUBL-CHEK DP-50 is a combustible liquid 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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