

Sherwin DP-50 Dye Penetrant

Special Features

DP-50 is water washable 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, and glass and some plastics. Referred to as the visible dye penetrant method or color contrast method of inspection and can be used for weld inspection. Also, it's water soluble. Remove excess penetrant with a simple water wash - no need for harsh and dangerous chemicals during inspection.

Special Features

- Brings flaws into sharper, clearer focus with more intense red color.
- 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.

Why's Sherwin so good?

Sherwin NDT products are market leaders in quality, performance and reliability - a bold statement, but backed up by over 26 critical manufacturer approvals, including Boeing, Airbus, Rolls-Royce, Lockheed-Martin and other OEM's. Together, NDT products provide a non-destructive method of inspecting materials, parts, assemblies, equipment, surfaces and structures often referred to as the 'visible dye penetrant method' or 'colour contrast method' of inspection.

Technical Data

| | |
|-----------------------|-----------------|
| Color: | Red |
| Viscosity: | 7.07 cSt@100°F |
| Flash Point: | 104°C |
| Boiling Point: | 148°C |
| Odour: | Petroleum Odour |

| PRODUCT NAME | Size (ml) | Ea/Pack/Carton Qty | Code |
|-----------------------------|-----------|--------------------|------------|
| Sherwin DP-50 Dye Penetrant | 400 | 1/12 | SPSPD50400 |



| COMPANION PRODUCTS | Size (ml) | Ea/Pack/Carton Qty | Code |
|-------------------------------|-----------|--------------------|------------|
| Sherwin DR-60 Cleaner/Remover | 400 | 1/12 | SPSDR60400 |
| Sherwin D-100 Developer | 400 | 1/12 | SPSDE10400 |

0800 278 600
sales@euromarc.co.nz
euromarc.co.nz

euromarc®
So Quick. So Easy

Sherwin DP-50 Dye Penetrant

Instructions

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 DP-50 only to clean, dry surfaces by spraying, flowing, brushing or dipping.
- 2. Dwell:** 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, dry rag or toweling. Remove remaining penetrant film by wiping with a rag or toweling 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 160°F (71°C) 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 in to 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.

Health & Safety

DP-50 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.

Storage /Shelf Life

Keep away from moisture and sunlight. Temperature limit: 0-50°C
Keep the container closed when not in use.
Shelf life from invoice date: Aerosol Can 36 months

Specifications

SAE AMS 2644 & QPL
MIL-I-25135 Revisions C, D, & E ASME Code NOT, Sec V

Sherwin D-100 Developer

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 for display against a white background by solvent and capillary action. Complies with low sulfur and low halogen requirements.

Special Features

- D-100 lays on the surface in a thinner, more uniform, more absorbent coating.
- D-100 has superior suspension properties.
- It is easily removed by light brushing or spray water rinse.
- D-100 works well on smooth or rough surfaces.
- D-100 can be used on machined or coated surfaces.
- D-100 can be used with both visible and fluorescent penetrants.

Size: 400ml.



Sherwin DR-60 Cleaner/Remover

DR-60 removes excess, nonwater-washable penetrants (DP-50) from part surfaces.

Used for cleaning oily, and dirty surfaces before applying the penetrant. After the dye penetrant is applied, use the DR-60 on a cloth to manually wipe off the excess material. Complies with low sulfur and low halogen requirements.

Special Features

- Can be used as a pre-cleaner for penetrant inspection evaporates completely and rapidly.
- Relatively volatile.
- Non-Miscible in water.
- Non-chlorinated material.

Size: 400ml.



0800 278 600
sales@euromarc.co.nz
euromarc.co.nz

euromarc®
So Quick. So Easy