Sherwin D-100 Developer

Description

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.

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

PRODUCT NAME	Size (ml)	Ea/Pack/Carton Qty	Code
Sherwin D-100 Developer	400	1/12	SPSDE10400





COMPANION PRODUCTS	Size (ml)	Ea/Pack/Carton Qty	Code
Sherwin DP-50 Dye Penetrant	400	1/12	SPSDP50400
Sherwin DR-60 Cleaner/Remover	400	1/12	SPSDR60400





Sherwin D-100 Developer

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 the penetrant 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:** Use the appropriate washing method to remove the excess penetrant from the surface.
- **4. Drying:** A re-circulating oven set no higher than 1600F (710C) 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.
- **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 vaporizing tip, the spray tank should be pressurized to 15-30 pounds of pressure and have a stirrer to keep the powder in suspension.
- 6. Inspection: Inspect parts under appropriate light intensity.

Health & Safety

D-100 is highly flammable, use in a well ventilated area. Avoid prolonged or repeated inhalation of vapor and 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

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

Sherwin DP-50 Dye Penetrant

Red colored, water-washable dye penetrant liquid 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 non-ferrous metals, ceramics, and glass and some plastics. Referred to as the visible dye penetrant method or colour contrast method of inspection and can be used for weld inspection.

Special Features

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

Size: 400ml.



Sherwin DR-60 Cleaner/Remover

DR-60 removes excess, nonwaterwashable 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.



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