

TECHNICAL DATA SHEET

VP-2S Solvent Removable Visible Penetrant

Code 1561

DESCRIPTION

CalCheck™ VP-2S is a solvent removable, post emulsifiable visible penetrant and used to locate cracks, laps, pores, lack of bonding, and similar surface discontinuities. CalCheck™ VP-2S can be used on nonporous parts including both ferrous and nonferrous metals, ceramics, and glass

FEATURES & BENEFITS

- Brings flaws into sharper, clearer focus with more intense colour.
- Performs more reliably over a greater range of temperatures.
- Meets stringent low sulfur and chloride requirements
- Long lasting flaw mark indications; less fading
- Greater convenience and portability in aerosol form.

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 VP-2S 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.
- 3. Removal:**
 - a. Hydrophilic Dip Method:**
 - I. Pre-Wash:** Following the dwell, use a plain water rinse to remove most of the undrained penetrant from the surface. Use a coarse spray of ambient temperature water.
 - II. Immersion:** Immerse and agitate the part in 20-30% hydrophilic emulsifier solution. Immersion time and agitation time will vary with part geometry and surface condition.
 - III. Rinse:** Remove the part from the tank; clean with a coarse, plain water spray.
 - b. Hydrophilic Spray Method:**
 - I. Wash:** Following the dwell, use an injection of 0.1 to 5.0% emulsifier solution to wash the excess penetrant from the part surface. Time and solution concentrations will vary with part geometry and surface conditions.



TECHNICAL DATA SHEET

- II. **Rinse:** Use a coarse plain water spray to remove all traces of the emulsified penetrant.
- c. **Lipophilic Method:**
 - I. **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.
 - II. **Rinse:** Use a coarse plain water spray to remove all traces of the emulsified penetrant.
- d. **Solvent Wipe Method:** Remove as much excess penetrant as possible using a clean, lint free dry rag or towel. Remove remaining penetrant film by wiping with a rag or towel 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 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 pressurized air to disperse and remove as much excess water as possible. 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. Discontinuities are visible under appropriate lighting almost immediately but, allow sufficient developing time to enhance the flaw visibility.
6. **Inspection:** Inspect parts under appropriate light.

PHYSICAL PROPERTIES

Colour: Red
 Odour: low petroleum
 Boiling Point:
 Specific Gravity:
 Flash Point:
 Water Tolerance:

ORDERING INFORMATION

Product Code	Packaging
1487/400	400ml (Aerosol)

TECHNICAL DATA SHEET

SPECIFICATION COMPLIANCE

- ISO3452-2
- AMS2644
- ASTM E1417
- ASTM E165
- ASME BPVC Section V

DANGER

Extremely flammable aerosol. Pressurized container: may burst if heated. May be fatal if swallowed and enters airways Causes skin irritation. Causes eye irritation. May cause drowsiness and dizziness. Risk of explosion if heated under confinement.

PRECAUTION

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing gas.

FIRST AID

IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. If eye irritation persists get medical; advice/attention.

STORAGE

Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122 °F. Store in a well-ventilated place. Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SHELF LIFE

60 months (5 years) from date of manufacture.

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

WARRANTY – All statements, information and data presented herein are believed to be accurate and reliable but are not to be taken as a guarantee, expressed or implied, for which seller assumes legal responsibility and they are offered solely for your consideration, investigation and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe on any patent.

Created 1st September 2020 Date Printed 24/12/2024 11:17 AM