FGP-20 WATER-WASHABLE PENETRANT

Technical Data Sheet

Description: FGP-20 is a NSF certified penetrant, category P1, registration number 150866. It meets level 2, Method A water-washable fluorescent penetrant requirements. **FGP-20** is a versatile, general purpose penetrant for use on a variety of materials, including stainless steel, aluminum and magnesium. Complies with low sulfur and low halogen requirements.

FGP-20 is exempted from regulation as a food additive, premarket notification to the FDA is not considered necessary, nor is explicit FDA approval relevant for the intended application. NSF has processed the Registration of FGP-20 to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements including FDA 21 CFR for appropriate use, ingredient and labeling review. This product is acceptable for use as a penetrant for the detection of cracks, surface breaking flaws and leaks (PI) in and around food processing areas. The product must only be used in such a manner as to ensure it will have neither direct nor indirect contact with food or potable water. Use must also be consistent with the manufacturer's directions and warnings

Chemical Properties

Color:	Green
Odor:	mild
Viscosity:	16.3 cSt @ 100^0F
Fluorescence:	Yellow/Green
Flash Point:	None

Packaging

One Gallon Cans 55 Gallon Drums
Five Gallon Cans

Storage /Shelf Life

Keep away from moisture and sunlight.
Temperature limit: 40^0F to 125^0F (0-50^0C)
Keep the container closed when not in use.
Shelf life from invoice date: Bulk Container – 60 months

Special Features

1. NSF certified penetrant, category P1
2. Low to near zero background for assured indication visibility.
3. Sharp, precise flaw indications for rapid interpretation.
4. Water base, bio-degradable penetrant.
5. Clean, odorless product, vapor free, except water atmosphere.
6. Long material tank life due to formula stability and non-volatility.
7. Low material consumption (low drag out) due to low viscosity.

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 **FGP-20** 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 ambient temperature water to rinse **FGP-20** from the part surface. To avoid washing entrapped penetrant from surface flaws, do not use high water pressure or temperatures and avoid prolonged washing times.

4. **Drying**: Use a heat gun, ambient evaporation or if appropriate a re-circulating oven, heating temperatures should not exceed 160^0F (71^0C). Heat the part just long enough to evaporate surface moisture. Evaporation is improved by using pressurized air to disperse and remove as much excess water as possible before or during drying.

5. **Inspection:** Inspect parts under appropriate UV-A light intensity and minimal visible light.

Health & Safety

FGP-20 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.