MAGNAFLUX

PRODUCT DATA SHEET

SKL-WP2 WATER WASHABLE PENETRANT

CLASSIFICATION

- *Type 2, Method A (Water Washable)*
- *Type 2, Method C (Solvent Removable)*

GENERAL DESCRIPTION

SKL-WP2 is a red visible dye, low odor penetrant which exhibits outstanding penetrating characteristics that provide for increased reliability of discontinuity identification. SKL-WP2's water wash removability in Method A applications eliminates the need for solvent removers or emulsifiers to remove excess surface penetrant.

Warning! Penetrants attack and even dissolve many kinds of plastic pipe. Polyvinyl chloride (PVC) pipe is especially vulnerable, and can crumble after only a few days of exposure. Even diluted penetrant rinsings attack it rapidly. ABS plastic pipe is nearly as sensitive. When installing plumbing to handle penetrant rinsings, use metal pipe.

APPLICATIONS

SKL-WP2 is typically used in the inspection and detection of welds, shrink cracks, casting cracks and porosity.

COMPOSITION

SKL-WP2 is composed of a blend of non-volatile penetrating oils, surface active agents (emulsifiers) and dye.

TYPICAL PROPERTIES (Not a specification)

Typical Properties	SKL-WP2
Color	Dark Purplish Red
Flash Point	200°F Minimum
Corrosion	Meets Requirements of AMS 2644
Density	7.3 lb/gal @ 60F (0.88gm/cc)
Viscosity @ 38°C	7.2 - 8.8 cs
VOC	477 g/l
NPE-Free	Yes

METHOD OF APPLICATION

SKL-WP2 may be applied by aerosol, dipping, flooding, brushing, or conventional spray.

PENETRATION - DWELL TIME

The generally accepted minimum penetration time is 10 minutes, although specific process specifications may require longer dwell times.

TEMPERATURE

SKL-WP2 should be used at temperatures between 40º F – 125º F. Lower temperatures thicken the penetrant and longer penetration times are necessary. High temperatures should be avoided since this can lead to the breakdown of the dye resulting in color fade.

PENETRANT REMOVAL

Method A: SKL-WP2 is generally removed by water spray. The wash temperature envelope is 50º F to 100º F. (Use of water removal of SKL-WP2 below 32º F is impractical because of freezing.)

Method C: SKL-WP2 can be removed by SKC-S solvent cleaner/remover. Moisten a cloth or paper towel with cleaner/remover and wipe excess penetrant from the surface. Do not flood part surface with cleaner/remover as this could impair sensitivity.

RECOMMENDED DEVELOPERS

A developer is used to maximize the sensitivity and to provide a white contrasting background against which the red indications can be readily seen. Two types of developer can be used:

SKD-S2: SKD-S2 is quick drying and must be applied by spraying as dipping or brushing will destroy indications. The part under test must be dry before developer application.

ZP-5B: ZP-5B is a water suspendible developer which may be applied by dipping. After application, the part under test must be dried before inspection.

SPECIFICATION COMPLIANCE: AMS 2644, Boeing PS 21202, MIL-STD-271, ASME B&PV Code, Section V, MIL-STD-2132, NAVSEA 250-1500-1, AECL, ASTM E 165, ASTM E 1417, ISO 3452-2 (Sensitivity Level 2)

PACKAGING

1 Gal. Container (case of 4), 5 Gal. Pail, 55 Gal. Drum, and Aerosols.

COVERAGE

(1) Gal. covers approximately 1,200 square feet.
(1) 16 fl. oz. aerosol can covers approximately 65 square feet.