

SPOTCHECK®

SPOTCHECK SKL-MP

WATER WASHABLE AND SOLVENT REMOVABLE DUAL PURPOSE PENETRANT

General Description

SPOTCHECK SKL-MP is a general-purpose washable water and solvent removable multi-purpose penetrant. SKL-MP exhibits outstanding penetrating characteristics which provides for maximum reliability in locating surface-open flaws and discontinuities both in white light and UV light.

SKL-MP is formulated to give excellent controlled washability over wide temperature ranges and variable dwell times. It can be used over the entire spectrum of industrial applications, where a visible penetrant inspection system meets the requirements for surface-open flaw detection.

Applications

Typical applications include castings, forgings, leak testing, welds and general metal work.

SKL-MP has also been successfully used on non-porous ceramics and similar materials. However, it is not recommended for the inspection of plastic materials, as it may stain, soften or even dissolve the base material under test.

Benefits

- ✓ Outstanding penetrating characteristics
- ✓ Water washable and solvent removable
- ✓ Broad range of applications

Composition

SKL-MP is composed of a blend of petroleum distillates, non-ionic surfactants and red dye.

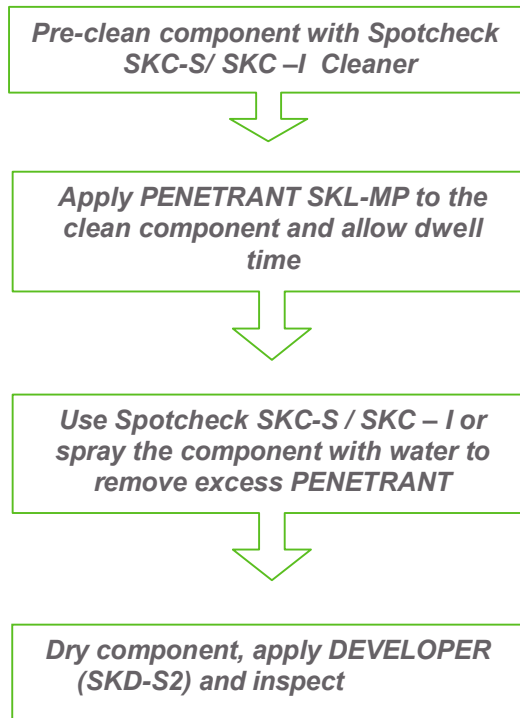


Typical Properties (not a specification)

Property	SKL-MP
Colour	Pinkish Red / Orange
Odour	Bland
Flash point	> 93 °C (bulk product)
Density	0.88 g/cm ³
Viscosity	8.0 mm ² /s
ISO 3452 Classification	Type III Method A & C
ISO 3452 sensitivity level	Level 2
Corrosion	ISO 3452

Like all Magnaflux materials SPOTCHECK SKL-MP is closely controlled to provide unique batch to batch consistency and uniformity to assure optimum process control and inspection reliability.

General Method of Use



Pre-Cleaning

Test parts must be clean and dry, and free from oil, grease or other foreign contaminating substances before penetrant is applied. To clean the surface, we recommend the use of the Magnaflux cleaner Spotcheck SKC-S or SKC - I.

Method of Application

Penetrants can be applied by immersion dip, brush, flow on, conventional or electrostatic spray. Whichever method of application is used, the test area must be completely covered with penetrant.

Penetration Time and Temperature

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

SKL-MP should be used at temperatures between 5 °C and 55 °C.

Please note: Lower temperatures thicken the penetrant and longer penetration times will then be necessary.

Penetrant Removal

SKL-MP excess surface penetrant is removed by spraying the component under test with clean water. The water wash temperature should generally be between 10°C and 40°C.

Alternatively, the excess surface penetrant can be removed using a lint-free cloth dampened with SPOTCHECK SKC-S / SKC - I cleaner using a single wipe action.

Once the surface penetrant has been removed, the component should be dried prior to solvent developer application.

Developing

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:

- **Solvent based developers** are quick drying materials which are applied by spraying. The component under test must be dry before developer application.

Note: To maximize penetrant sensitivity, parts should not remain in aqueous developers for any length of time. Allow a minimum of 10 minutes development time before inspecting the component under white light where indications, if present, will appear Pinkish red against the white developer background.

Recommended Cleaner/Remover/Developers for SKL-MP

Product type	Product name	Type
Pre-cleaner	SPOTCHECK SKC-S	Solvent based Solvent based
Remover	SPOTCHECK SKC-S	Solvent based Solvent based
Developer	SPOTCHECK SKD-S2	Solvent based

Post Cleaning

Post cleaning of the tested component can be carried out if required, by an appropriate technique. Developer residues can be removed either by wiping with a cloth or by a water and detergent wash. Penetrant residues can be removed by vapor degreasing or solvent soak.

Specification Compliance

Specification	SKL-MP
ASME B & PV Code, Sec V	✓
ASTM E-165	✓
ASTM E-1417	✓
EN 571-1	✓
EN-ISO 3452-2 Sensitivity Level 2	✓

Availability

SKL-MP is available as follows:

- 1 litre pack, part number
- Aerosol pack, part number

Coverage

1 litre covers approximately 30 square meters.

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Health and Safety

- Safety Data Sheet for this product is available on request from your Magnaflux distributor or via the Magnaflux website (www.in.magnaflux.com).
- Read the relevant Safety Data Sheets before use.

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