

SPOTCHECK®

Spotcheck SKD-S2

NON AQUEOUS DEVELOPER

General Description

Spotcheck SKD-S2 is a ready to use suspension of white developing particles in a fast drying solvent.

SKD-S2 produces an opaque white coating, which provides an excellent contrasting background for SPOTCHECK OR ZYGLO penetrant indications. SKD-S2 is specially formulated to be low in sulfur and halogens and contains no chlorinated hydrocarbons.

SKD-S2 non aqueous developer provides maximum sensitivity through its solvent action on the penetrant at the defect site. SKD-S2 is compatible with and approved for use with all MAGNAFLUX Spotcheck and Zyglo penetrants.

Composition

SKD-S2 is composed of a blend of inert inorganic particles suspended in a solvent blend based on isopropanol and acetone.

Benefits

- ✓ Provides excellent contrast with red penetrants
- ✓ Quick drying
- ✓ Ease to use
- ✓ Cost effective

Typical Properties (Not a specification)

Property	SKD-S2
Colour	White suspension
Odour	Alcoholic
Flash point	- 6°C
Density	0.88 g/ml
Corrosion	Meets AMS 2644
Sulfur content	< 300 ppm
Chloride content	< 300 ppm
Fluoride content	< 50 ppm
AMS 2644 class	Form d type 1, Form e type 2
AMS 2644 sensitivity	N/A
EN-ISO 3452-2	Approved

Like all MAGNAFLUX materials, Spotcheck SKD-S2 is closely controlled to provide unique batch to batch consistency and uniformity to assure optimum process control and inspection reliability.

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Method of Application

On standing, developer particles will settle out of suspension and must be re-suspended before use.

SKD-S2 should be applied by spraying only, as dipping or brushing will cause excessive solvent action on the penetrant in discontinuities.

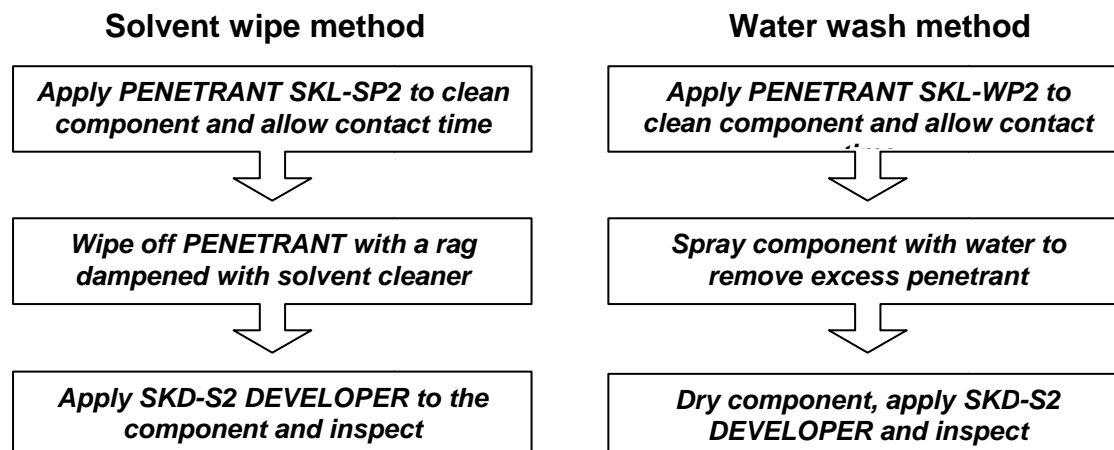
SKD-S2 may be applied by aerosol, or conventional spray gun. Developers should be applied only after the test surface has been cleaned of excess penetrant, and the cleaning medium (for example a solvent such as Spotcheck SKC-S) has been dried off.

Non-aqueous developers should be sprayed in thin even layers, which just wet the surface. Too wet a spray will cause excessive bleeding and running of indications; whereas too dry a spray will result in slow indication development, as well as possible loss in overall sensitivity due to limited solvent action.

The coating should be a relatively thin even white coating. SKD-S2's unique formula permits a thin coating to hide surface blemishes, which could interfere with indications interpretation. A thick coating is not required for this effect and is undesirable as masking of indications could result.

- With Spotcheck penetrants cracks will appear as red lines and porosity as spots. A general reddish colour or pink developer film indicates incomplete removal of surface penetrant.
- With Zyglo penetrants inspection is performed with a black light such as the Magnaflux ZB-100F. Indications will fluoresce yellow/green. A general greenish fluorescent developer film indicates incomplete removal of surface penetrant.

The following diagram shows the sequence of operations for the Solvent wipe & Water washable red penetrant process.



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 vapour degreasing or solvent soak.

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Specification Compliance

Specification	SKD-S2
<input type="checkbox"/> AMS 2644	✓
<input type="checkbox"/> ASME B & PV Code, Sec V	✓
<input type="checkbox"/> ASTM E-165	✓
<input type="checkbox"/> ASTM E-1417	✓
<input type="checkbox"/> BAC 5423	✓
<input type="checkbox"/> EN 571-1	✓
<input type="checkbox"/> EN-ISO 3452-2	✓
<input type="checkbox"/> McDonnell Douglas PS-21202	✓
<input type="checkbox"/> MIL-STD-271	✓

Availability

SKD-S2 is available as follows:

- 10 x 400ml aerosols, part number 008A007
- 4 x 5 litre packs, part number 055C014

Coverage

1 aerosol covers approximately 4 - 5 square metres
1 litre covers approximately 15 - 18 square metres

Health and Safety

- Safety data sheets for this product are available on request from your Magnaflux distributor or via the Magnaflux website (www.magnaflux.com)
- Read the relevant safety data sheets before use
- Avoid contact with skin and eyes
- Avoid breathing spray mists
- Wear suitable gloves and eye protection if there is a risk of skin or eye contact

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