

**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.

### Typical Properties (not a specification)

Property	SKD-S2
Colour	White suspension
Odour	Alcoholic
Flash point	-16 °C (bulk product)
Density	0.87 g/cm <sup>3</sup>
Corrosion	Meets AMS 2644
Sulfur content	< 1000 ppm
Chloride content	< 1000 ppm
AMS 2644 class	Form d type 1, Form e type 2

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.

### Benefits

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



## SPOTCHECK®

### Application versatility

- ✓ Can be used with a variety of Type 2 and Type 1 penetrants in many different situations without measuring or diluting
- ✓ ISO 3452 conformance allows SKD-S2 to be used to inspect a wide range of parts

### 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.

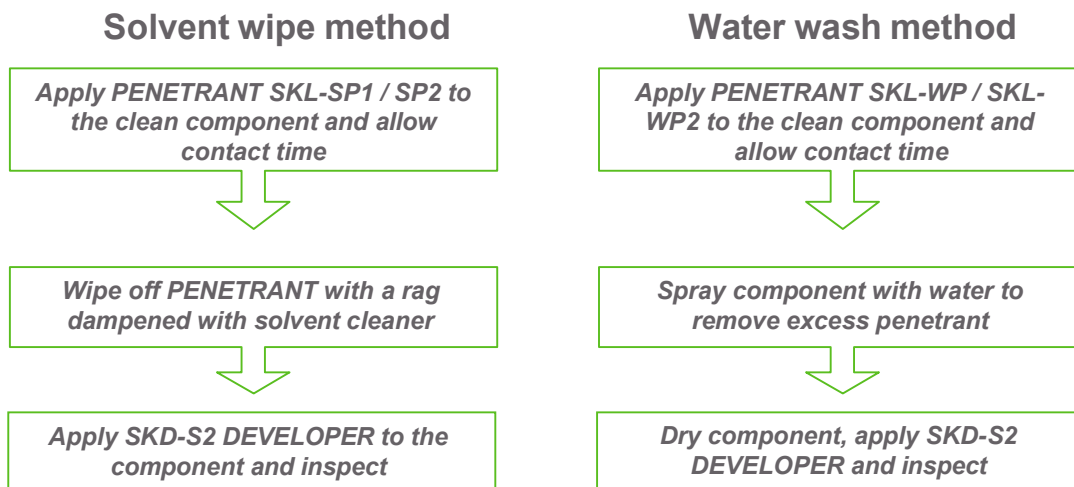
SKD-S2 may be applied by aerosol, or conventional spray gun. Developers should be applied only after the test surface has been cleaned of excess penetrant, and the cleaning medium (for example a solvent such as Spotcheck SKC-S or SKC - I) has been dried off.

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 thincoating 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.



## SPOTCHECK®

### 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.

### Specification Compliance

Specification	SKD-S2
AMS 2644	✓
ASME B & PV Code, Sec V	✓
ASTM E-165	✓
ASTM E-1417	✓
EN 571-1	✓
EN-ISO 3452-2	✓
Nuclear Power Corporation of India Limited	✓
IS-3658	✓

### Use Recommendations

NDT Method	Penetrant Testing
Form(s)	d/e
Usage	40 to 125°F / 5 to 52°C
Storage Temperature	50 to 118°F / 10 to 48°C

### Availability

SKD-S2 is available as follows:

- Aerosols, part number F01008
- 1 litre packs, part number F01007

### 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.in.magnaflux.com](http://www.in.magnaflux.com)).
- Read the relevant Safety Data Sheets before use.

**ITW INDIA PRIVATE LIMITED,**  
Plot No: 51, 52, 207 & 208, Phase – 2,  
IDA, TSIIIC, Pashamylaram,  
Sangareddy Dist.-502307,  
Telangana, India

Tel: +91 8455 224710 Fax: +91 8455 224709  
Email: [magnafluxinfo@magnafluxindia.com](mailto:magnafluxinfo@magnafluxindia.com)  
[www.in.magnaflux.com](http://www.in.magnaflux.com)

F/MKTG/16/03 Rev 7/2021

