

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. PRODUCT IDENTIFIER

Product form : Mixture  
Product name : SPOTCHECK® SKL-SP2

### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

#### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Use of the substance/mixture : Non-Destructive Testing.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

#### Manufacturer

Magnaflux® (A Division of ITW Ltd)  
Faraday Road, South Dorcan Industrial Estate  
SN3 5HE Swindon - UK  
T +44 (0)1793 524566 - F +44 (0)1793 490459  
[support.eu@magnaflux.com](mailto:support.eu@magnaflux.com) - [www.eu.magnaflux.com](http://www.eu.magnaflux.com)

### 1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : DURING OFFICE HOURS, CALL T: +44 (0)1793 524566 (English only) [Office hours (GMT) Monday - Thursday 8am - 5pm, Friday 8am - 4pm];  
OUT OF OFFICE HOURS, CALL T: +44(0)203 394 9866

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Sens. 1 H317  
Asp. Tox. 1 H304

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. LABEL ELEMENTS

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP) :

Danger

Hazardous ingredients :

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; 2-Naphthalenol, 1-[2-[2-ethyl-4-[2-(2-ethylphenyl)diazenyl]phenyl]diazenyl]-, ar-heptyl derivs

Hazard statements (CLP) :

H304 - May be fatal if swallowed and enters airways.  
H317 - May cause an allergic skin reaction.

Precautionary statements (CLP) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations

EUH-statements :

EUH066 - Repeated exposure may cause skin dryness or cracking.

Unknown acute toxicity (CLP) - SDS :

80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)  
80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)  
93.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Unknown hazards to the aquatic environment (CLP) :

Contains 77.29 % of components with unknown hazards to the aquatic environment

## 2.3. OTHER HAZARDS

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. SUBSTANCES

Not applicable

### 3.2. MIXTURES

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 869062-45-3 (EC-No.) 920-107-4	60 - 100	Asp. Tox. 1, H304
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	(CAS-No.) 68515-48-0 (EC-No.) 271-090-9	10 - 20	Aquatic Acute 1, H400
2-Naphthalenol, 1-[2-[2-ethyl-4-[2-(2-ethylphenyl)diazenyl]phenyl]diazenyl]-, ar-heptyl derivs	(CAS-No.) 1401000-07-4 (EC-No.) 825-706-3	1 - 5	Skin Sens. 1, H317 Aquatic Chronic 4, H413

Full text of H-statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

### 4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### 4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. EXTINGUISHING MEDIA

Suitable extinguishing media	: Carbon dioxide. Dry chemical. Foam. Water spray or fog.
Unsuitable extinguishing media	: Do not use water jet.

### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon. Irritating fumes.
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### 5.3. ADVICE FOR FIREFIGHTERS

Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.
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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Spilled material may present a slipping hazard.
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#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

**6.2. ENVIRONMENTAL PRECAUTIONS**

Prevent entry to sewers and public waters.

**6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP**

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

**6.4. REFERENCE TO OTHER SECTIONS**

For further information refer to section 8: "Exposure controls/personal protection".

**SECTION 7: HANDLING AND STORAGE****7.1. PRECAUTIONS FOR SAFE HANDLING**

Precautions for safe handling : Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing. Do not swallow. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Handle and open container with care.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

**7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

Storage conditions : Keep out of the reach of children. Store tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep away from ignition sources. Keep only in the original container. Keep out of direct sunlight.

Storage temperature : 10 - 30 °C

**7.3. SPECIFIC END USE(S)**

Not available.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. CONTROL PARAMETERS**

No additional information available

**8.2. EXPOSURE CONTROLS****Appropriate engineering controls:**

Ensure good ventilation of the work station.

**Hand protection:**

Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

**Eye protection:**

Safety glasses or goggles are recommended when using product.

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Environmental exposure controls:**

Avoid release to the environment.

**Other information:**

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : Liquid

Appearance : Red

Colour : Red

Odour : Mild hydrocarbon

Odour threshold : No data available

pH : Neutral

Relative evaporation rate (butylacetate=1) : < 0.1 (BuAC=100)

Melting point : No data available

Freezing point	: No data available
Boiling point	: 230 °C
Flash point	: > 93 °C PMCC
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 0.5 mm Hg (@ 38°C)
Relative vapour density at 20 °C	: > 1 (air=1)
Relative density	: 0.85 g/cm <sup>3</sup>
Solubility	: Negligible.
Partition coefficient n-octanol/water	: 3.9 - 6 (distillates (petroleum), hydrotreated light naphthenic)
Viscosity, kinematic	: 3.3 mm <sup>2</sup> /s (@ 20°C)
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Non oxidizing.
Lower explosive limit (LEL)	: 1 vol %
Upper explosive limit (UEL)	: 6 vol %

## 9.2. OTHER INFORMATION

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. REACTIVITY

No dangerous reactions known under normal conditions of use.

### 10.2. CHEMICAL STABILITY

Stable under normal conditions.

### 10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use.

### 10.4. CONDITIONS TO AVOID

Heat. Incompatible materials. Direct sunlight.

### 10.5. INCOMPATIBLE MATERIALS

Strong oxidizing agents. Acids. Alkalis.

### 10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon. Irritating fumes.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

#### 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich (68515-48-0)

LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg

Unknown acute toxicity (CLP) - SDS	: 80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 93.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))
Skin corrosion/irritation	: Not classified.
Additional information	: Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.

Reproductive toxicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Aspiration hazard	: May be fatal if swallowed and enters airways.

**SPOTCHECK® SKL-SP2**

Viscosity, kinematic	3.3 mm²/s (@ 20°C)
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Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.
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**SECTION 12: ECOLOGICAL INFORMATION**
**12.1. TOXICITY**

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
Unknown hazards to the aquatic environment (CLP)	: Contains 77.29 % of components with unknown hazards to the aquatic environment
Acute aquatic toxicity	: Not classified.
Chronic aquatic toxicity	: Not classified.

**1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich (68515-48-0)**

LC50 fish 1	0.42 mg/l (Exposure time: 96 h - Species: Ictalurus punctatus [flow-through])
LC50 fish 2	> 0.16 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	> 0.086 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 96h algae (1)	> 2.8 mg/l (Species: Pseudokirchneriella subcapitata)

**12.2. PERSISTENCE AND DEGRADABILITY**
**SPOTCHECK® SKL-SP2**

Persistence and degradability	Not established.
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**12.3. BIOACCUMULATIVE POTENTIAL**
**SPOTCHECK® SKL-SP2**

Partition coefficient n-octanol/water	3.9 - 6 (distillates (petroleum), hydrotreated light naphthenic)
Bioaccumulative potential	Not established.

**12.4. MOBILITY IN SOIL**

No additional information available

**12.5. RESULTS OF PBT AND VPVB ASSESSMENT**

No additional information available

**12.6. OTHER ADVERSE EFFECTS**

Additional information	: No other effects known
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**SECTION 13: DISPOSAL CONSIDERATIONS**
**13.1. WASTE TREATMENT METHODS**

Product/Packaging disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
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**SECTION 14: TRANSPORT INFORMATION**

In accordance with IATA / IMDG / ADR

**14.1. UN NUMBER**

UN-No. (ADR)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated

**14.2. UN PROPER SHIPPING NAME**

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated

**14.3. TRANSPORT HAZARD CLASS(ES)**
**ADR**

Transport hazard class(es) (ADR) : Not regulated

**IMDG**

Transport hazard class(es) (IMDG) : Not regulated

**IATA**

Transport hazard class(es) (IATA) : Not regulated

**14.4. PACKING GROUP**

Packing group (ADR) : Not regulated

Packing group (IMDG) : Not regulated

Packing group (IATA) : Not regulated

**14.5. ENVIRONMENTAL HAZARDS**

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available.

**14.6. SPECIAL PRECAUTIONS FOR USER**

Special transport precautions : Do not handle until all safety precautions have been read and understood.

**14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE**

Not applicable

**SECTION 15: REGULATORY INFORMATION**
**15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE**
**15.1.1. EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance.

Contains no REACH Annex XIV substances

**15.1.2. National regulations**
**National regulations (Germany):**

Wassergefährdungsklasse (water hazard class): WGK 1 – Low hazard to waters

TechnischeAnleitungLuft (TA-Luft): Class 5.2.5 Organic substances, except dusts.

**15.2. CHEMICAL SAFETY ASSESSMENT**

No chemical safety assessment has been carried out

**SECTION 16: OTHER INFORMATION**

Indication of changes:

None.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Prepared by : Nexreg Compliance Inc.

[www.Nexreg.com](http://www.Nexreg.com)


Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	H317	Calculation method
Asp. Tox. 1	H304	Calculation method

SDS EU (REACH Annex II)\_NEXREG\_NEW\_Magnaflux

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## SKL-SP2

### Solvent-Removable Visible Penetrant



SPOTCHECK® SKL-SP2 is a solvent-removable visible penetrant designed for portability, especially for welding operations, and is post-emulsifiable for greater resolution of flaw indications. It produces a visible red colour contrast, and features outstanding penetrating characteristics.

Noted for its compatibility with special alloys, such as stainless steel, aluminum, magnesium and titanium, SKL-SP2 is highly reliable at locating surface-open flaws and discontinuities, and can be used on non-porous ceramics and similar materials.

#### BENEFITS

##### Fastest inspection processing

- A convenient and easy-to-use solution for preventative maintenance and control checks.
- Quickly and completely covers the entire test surface due to high surface wetting.
- Remove excess penetrant without water to eliminate the need to dry parts before applying developer.

##### Dependable and convenient to use

- Easy to carry and use in the field with the convenient aerosol cans which are carefully designed for consistent, even coverage and maximum test area coverage
- Use in all conditions without the need for darkness or UV lights.

##### Wide application versatility

- Inspect a wide range of components without fear of corrosion.
- Meets AMS 2644 and is NDT-approved for professional industrial applications

##### Maximum indication detection

- Produces strong, vibrant indications thanks to the bright, vibrant red color, especially when used with SKD-S2 solvent-based developer

##### Maximise operator comfort and safety

- Promotes better inspection quality by providing the operator with a more comfortable work environment.
- Reduces discomfort from strong odours.
- Exceeds all EHS requirements, does not contain NPEs or phthalates

#### SPECIFICATION COMPLIANCE

- AMS2644
- ASME BPVC-V
- ASTM D129
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2 (Sensitivity Level 2)
- MIL-STD-2132D



# SKL-SP2

## FEATURES

- Outstanding penetrating characteristics
- Vivid, high-contrast red colour
- Superior flaw resolution
- Excellent reliability
- Wide range of applications
- Solvent removeable
- ISO 3452 sensitivity level #2
- Can be used for Method B, Method C and Method D
- Simple, easy-to-use process
- Good surface wetting
- Optimised capillary action
- Works in visible light
- Very low toxicity
- Low odour
- NDT-spec compliant

## APPLICATIONS

**Defect location: open to surface**

**Ideal for:**

- Castings
- Forgings
- Welds
- Pressure vessels
- Tubular goods
- General metal work
- Leak testing
- Use in power plants
- Construction applications.

**Defect examples:**

- Cracks
- Leaks

## COMPOSITION

A blend of petroleum distillates, plasticiser and an oil-soluble organic red dye.

## PRODUCT PROPERTIES

<b>Form and colour</b>	Red liquid
<b>AMS 2644 class</b>	Type 2, Method B/C/D
<b>Flash point</b>	> 93°C (bulk product)
<b>Density</b>	0.85 g/cm <sup>3</sup>
<b>Viscosity</b>	3.8 mm <sup>2</sup> /s
<b>Sulphur content</b>	< 300 ppm
<b>Chloride content</b>	< 300 ppm
<b>Corrosion</b>	Meets AMS 2644

Like all Magnaflux materials, our visible penetrants are closely controlled to ensure batch-to-batch consistency, optimum process control and inspection reliability.

## USER RECOMMENDATIONS

<b>NDT Method</b>	Penetrant Testing, Visible
<b>Storage temperature</b>	10°C to 30°C
<b>Usage temperature</b>	5°C to 55°C (bulk) -5°C to 50°C (aerosol)
<b>Coverage</b>	20 - 30m <sup>2</sup> per litre 10 - 15m <sup>2</sup> per aerosol
<b>Cleaner/remover</b>	SKC-S
<b>Hydrophilic emulsifier</b>	ZR-10C
<b>Solvent-based developer</b>	SKD-S2
<b>Water-based developer</b>	ZP-5B
<b>Accessories</b>	Reference test block (part no. 070C001)

## SKL-SP2

### INSTRUCTIONS FOR USE

**NOTE:** we do not recommend SKL-SP2 for inspecting plastic materials, as it may stain, soften or even dissolve the base material under test.

Ensure test part is clean and dry, and free from oil, grease and other contaminants.

Apply penetrant by immersion dip, brush, flow on, conventional or electrostatic spray. Cover the test area completely.

Allow penetration time. Minimum penetration time is 2 to 5 minutes, with 10 minutes being adequate for most situations. Lower temperatures thicken the penetrant and require longer penetration times.

Remove excess surface penetrant with a solvent wipe or by the hydrophilic remover method.

Apply a thin layer of developer\* to the surface and allow a minimum of 10 minutes development time before inspecting the component under white light. Indications will appear dark red against the white developer background.

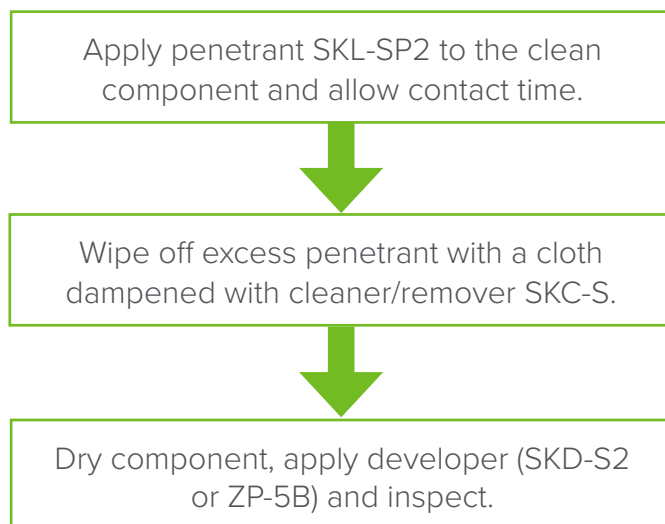
\* A developer is used to maximise sensitivity and provide a white contrasting background. Two types of developer can be used:

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

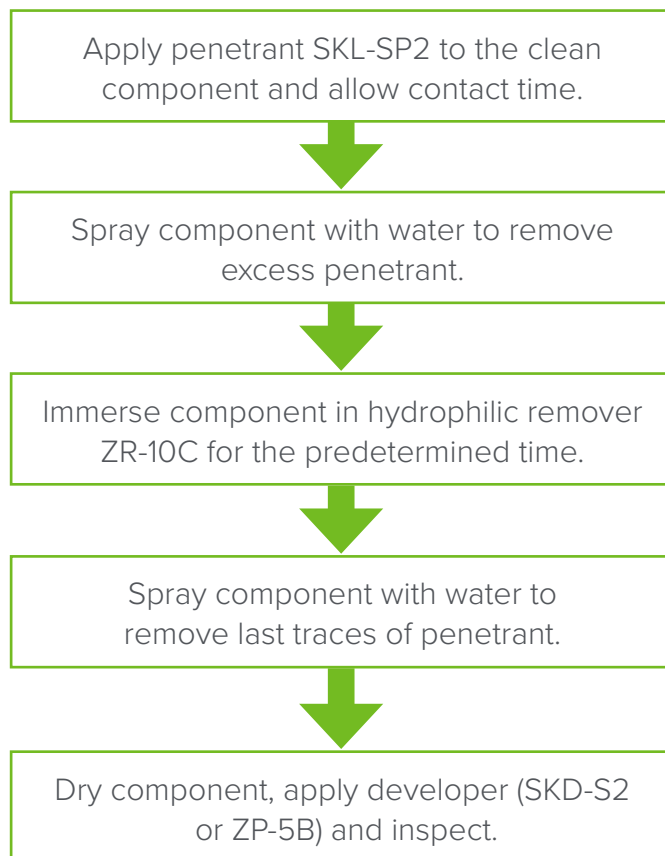
**Water-based (aqueous):** can be applied by dipping or spraying. To maximise penetrant sensitivity, parts should only be exposed to aqueous developers for short periods of time. The component must be dried before inspection.

Developer residue 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.

### Solvent wipe method



### Hydrophilic method



# SKL-SP2

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## PACKAGING AND PART NUMBERS



008A016 (x 10)



055C076 (x 4)

## SK-3 Penetrant Inspection Kit

The SK-3 Kit is a portable visible penetrant inspection kit that includes the following:

- 2 x 400 ml aerosol cans of SKL-SP2 penetrant
- 3 x 400 ml aerosol cans of SKC-S cleaner
- 3 x 400 ml aerosol cans of SKD-S2 developer
- 1 cloth
- 1 set of instructions
- 1 portable carrying case

The SK-3 kit is available as:

- Complete SK-3 kit - part number 008A038
- Carrying case only - part number 053C009

## HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the Safety Data Sheets, which are available at [eu.magnaflux.com](http://eu.magnaflux.com).

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. PRODUCT IDENTIFIER

Product form : Mixture  
Product name : SPOTCHECK® SKL-SP2 - aerosol  
Vaporizer : Aerosol

### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

#### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Use of the substance/mixture : Non-Destructive Testing.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

#### Manufacturer

Magnaflux® (A Division of ITW Ltd)  
Faraday Road, South Dorcan Industrial Estate  
SN3 5HE Swindon - UK  
T +44 (0)1793 524566 - F +44 (0)1793 490459  
[support.eu@magnaflux.com](mailto:support.eu@magnaflux.com) - [www.eu.magnaflux.com](http://www.eu.magnaflux.com)

### 1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : DURING OFFICE HOURS, CALL T: +44 (0)1793 524566 (English only) [Office hours (GMT) Monday - Thursday 8am - 5pm, Friday 8am - 4pm];  
OUT OF OFFICE HOURS, CALL T: +44(0)203 394 9866

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol 1 H222;H229  
Skin Sens. 1 H317  
Asp. Tox. 1 H304

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. LABEL ELEMENTS

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger

Hazardous ingredients : Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; 2-Naphthalenol, 1-[2-[2-ethyl-4-[2-(2-ethylphenyl)diazenyl]phenyl]diazenyl]-, ar-heptyl derivs

Hazard statements (CLP) : H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.  
H304 - May be fatal if swallowed and enters airways.  
H317 - May cause an allergic skin reaction.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

Unknown acute toxicity (CLP) - SDS	: 48.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 88.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 56.32% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Gas))
Unknown hazards to the aquatic environment (CLP)	: Contains 86.37 % of components with unknown hazards to the aquatic environment

### 2.3. OTHER HAZARDS

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. SUBSTANCES

Not applicable

### 3.2. MIXTURES

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 869062-45-3 (EC-No.) 920-107-4	30 - 60	Asp. Tox. 1, H304
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	(CAS-No.) 68515-48-0 (EC-No.) 271-090-9	5 - 10	Aquatic Acute 1, H400
2-Naphthalenol, 1-[2-[2-ethyl-4-[2-(2-ethylphenyl)diazanyl]phenyl]diazanyl]-, ar-heptyl derivs	(CAS-No.) 1401000-07-4 (EC-No.) 825-706-3	1 - 5	Skin Sens. 1, H317 Aquatic Chronic 4, H413

Full text of H-statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

### 4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. May result in aspiration into the lungs, causing chemical pneumonia.

### 4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. EXTINGUISHING MEDIA

Suitable extinguishing media	: Carbon dioxide (CO <sub>2</sub> ), dry chemical powder, foam. Water spray or fog.
Unsuitable extinguishing media	: Do not use water jet.

### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Fire hazard	: Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, oxides of nitrogen. Irritating fumes.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. ADVICE FOR FIREFIGHTERS

Firefighting instructions	: DO NOT fight fire when fire reaches explosives. Evacuate area.
Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water spray.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate every possible source of ignition. Use only non-sparking tools. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters.

### 6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

For containment : Stop leak without risks if possible. Move containers from spill area. Use only non-sparking tools. Use explosion-proof equipment. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.4. REFERENCE TO OTHER SECTIONS

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: HANDLING AND STORAGE

### 7.1. PRECAUTIONS FOR SAFE HANDLING

Additional hazards when processed : Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking. Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Avoid contact with skin and eyes. Ensure adequate ventilation. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Do not spray on an open flame or other ignition source. Use non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharge.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

### 7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep out of the reach of children. Store tightly closed in a dry and cool place. Keep away from ignition sources. Keep out of direct sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place.

Storage temperature : 10 - 30 °C

### 7.3. SPECIFIC END USE(S)

Not available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. CONTROL PARAMETERS

No additional information available

### 8.2. EXPOSURE CONTROLS

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

#### Eye protection:

Safety glasses or goggles are recommended when using product.

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Environmental exposure controls:**

Avoid release to the environment.

**Other information:**

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: Liquid
Appearance	: Red Aerosol
Colour	: Red
Odour	: Mild hydrocarbon
Odour threshold	: No data available
pH	: Neutral
Relative evaporation rate (butylacetate=1)	: < 0.1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 230 °C
Flash point	: -40 °C (aerosol propellant)
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 0.5 mm Hg (@ 38°C)
Relative vapour density at 20 °C	: > 1
Relative density	: 0.85 g/cm <sup>3</sup>
Solubility	: Negligible.
Partition coefficient n-octanol/water	: 3.9 - 6 (distillates (petroleum), hydrotreated light naphthenic)
Viscosity, kinematic	: 3.3 mm <sup>2</sup> /s (@ 20°C)
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: Non oxidizing.
Lower explosive limit (LEL)	: 1 vol %
Upper explosive limit (UEL)	: 6 vol %

**9.2. OTHER INFORMATION**

No additional information available

**SECTION 10: STABILITY AND REACTIVITY****10.1. REACTIVITY**

No dangerous reactions known under normal conditions of use.

**10.2. CHEMICAL STABILITY**

Extremely flammable aerosol. Extreme risk of explosion by shock, friction, fire or other sources of ignition. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

**10.3. POSSIBILITY OF HAZARDOUS REACTIONS**

No dangerous reactions known under normal conditions of use.

**10.4. CONDITIONS TO AVOID**

Heat. Incompatible materials. Sources of ignition. Direct sunlight.

**10.5. INCOMPATIBLE MATERIALS**

Strong oxidizing agents. Acids. Strong alkalis.

**10.6. HAZARDOUS DECOMPOSITION PRODUCTS**

May include, and are not limited to: oxides of carbon, oxides of nitrogen. Irritating fumes.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. INFORMATION ON TOXICOLOGICAL EFFECTS**

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich (68515-48-0)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg

Unknown acute toxicity (CLP) - SDS	: 48.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 88.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 56.32% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Gas))
Skin corrosion/irritation	: Not classified.
Additional information	: Based on available data, the classification criteria are not met. Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
STOT-repeated exposure	: Not classified.
Additional information	: Based on available data, the classification criteria are not met.
Aspiration hazard	: May be fatal if swallowed and enters airways.

SPOTCHECK® SKL-SP2 - aerosol	
Vaporizer	Aerosol
Viscosity, kinematic	3.3 mm²/s (@ 20°C)

Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.
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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
Unknown hazards to the aquatic environment (CLP)	: Contains 86.37 % of components with unknown hazards to the aquatic environment
Acute aquatic toxicity	: Not classified.
Chronic aquatic toxicity	: Not classified.

1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich (68515-48-0)	
LC50 fish 1	0.42 mg/l (Exposure time: 96 h - Species: Ictalurus punctatus [flow-through])
LC50 fish 2	> 0.16 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	> 0.086 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 96h algae (1)	> 2.8 mg/l (Species: Pseudokirchneriella subcapitata)

### 12.2. PERSISTENCE AND DEGRADABILITY

SPOTCHECK® SKL-SP2 - aerosol	
Persistence and degradability	Not established.

### 12.3. BIOACCUMULATIVE POTENTIAL

SPOTCHECK® SKL-SP2 - aerosol	
Bioaccumulative potential	Not established.

### 12.4. MOBILITY IN SOIL

No additional information available

### 12.5. RESULTS OF PBT AND VPVB ASSESSMENT

No additional information available

### 12.6. OTHER ADVERSE EFFECTS

Additional information	: No other effects known
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**SECTION 13: DISPOSAL CONSIDERATIONS****13.1. WASTE TREATMENT METHODS**

Product/Packaging disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Container under pressure. Do not drill or burn even after use.

**SECTION 14: TRANSPORT INFORMATION**

In accordance with ADR / IATA / IMDG

**14.1. UN NUMBER**

UN-No. (ADR) : 1950  
UN-No. (IMDG) : 1950  
UN-No. (IATA) : 1950

**14.2. UN PROPER SHIPPING NAME**

Proper Shipping Name (ADR) : AEROSOLS, flammable.  
Proper Shipping Name (IMDG) : AEROSOLS, flammable.  
Proper Shipping Name (IATA) : AEROSOLS, flammable.

**14.3. TRANSPORT HAZARD CLASS(ES)****ADR**

Transport hazard class(es) (ADR) : 2.1  
Danger labels (ADR) :

**IMDG**

Transport hazard class(es) (IMDG) : 2.1

**IATA**

Transport hazard class(es) (IATA) : 2.1

**14.4. PACKING GROUP**

Packing group (ADR) : Not applicable  
Packing group (IMDG) : Not applicable  
Packing group (IATA) : Not applicable

**14.5. ENVIRONMENTAL HAZARDS**

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available.

**14.6. SPECIAL PRECAUTIONS FOR USER**

Special transport precautions : Do not handle until all safety precautions have been read and understood.

**14.7. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL AND THE IBC CODE**

IBC code : Not applicable.

**SECTION 15: REGULATORY INFORMATION****15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE****15.1.1. EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance.

Contains no REACH Annex XIV substances

**15.1.2. National regulations****National regulations (Germany):**

Wassergefährdungsklasse (water hazard class): WGK 1 – Low hazard to waters

TechnischeAnleitungLuft (TA-Luft): Class 5.2.5 Organic substances, except dusts.

**15.2. CHEMICAL SAFETY ASSESSMENT**

No chemical safety assessment has been carried out

**SECTION 16: OTHER INFORMATION**

Indication of changes:

None.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Prepared by : Nexreg Compliance Inc.

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Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 1	H222;H229	Expert judgment
Skin Sens. 1	H317	Calculation method
Asp. Tox. 1	H304	Calculation method

SDS EU (REACH Annex II)\_NEXREG\_NEW\_Magnaflux

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