

Safety Data Sheet

Prepared according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 10/31/2018

Revision date: 10/31/2018 Version: 1.0

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

## 1.1. PRODUCT IDENTIFIER

Product form Product name

: Mixture : 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 - 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)

Signal word (CLP)



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)	<ul> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations</li> </ul>
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.
Unknown acute toxicity (CLP) - SDS	<ul> <li>80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)</li> <li>80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)</li> <li>93.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))</li> </ul>
Unknown hazards to the aquatic environment (CLP)	: Contains 77.29 % of components with unknown hazards to the aquatic environment



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## 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 ANI	DEFFECTS, 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		
Symptoms/effects after eye contact	an allergic skin reaction. : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear	

## 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 Unsuitable extinguishing media	<ul><li>Carbon dioxide. Dry chemical. Foam. Water spray or fog.</li><li>Do not use water jet.</li></ul>
5.2. SPECIAL HAZARDS ARISING FROM Fire hazard	THE SUBSTANCE OR MIXTURE         : Products of combustion may include, and are not limited to: oxides of carbon. Irritating fumes.
<b>5.3. ADVICE FOR FIREFIGHTERS</b> 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. Spilled material may present a slipping hazard.

## 6.1.1. For non-emergency personnel

No additional information available

## 6.1.2. For emergency responders

No additional information available



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## 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	<ul> <li>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.</li> </ul>	
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	

Storage temperature

of direct sunlight. : 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
рН	: Neutral
Relative evaporation rate (butylacetate=1)	: < 0.1 (BuAC=100)
Melting point	: No data available

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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/cm3
Solubility	: Negligible.
Partition coefficient n-octanol/water	: 3.9 - 6 (distillates (petroleum), hydrotreated light naphthenic)
Viscosity, kinematic	: 3.3 mm²/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	EF	FECTS
Acute t	oxicity (oral)	:	Not classified.
Acute t	oxicity (dermal)	:	Not classified.
Acute t	oxicity (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	<ul> <li>80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)</li> <li>80.59% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)</li> <li>93.88% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))</li> </ul>	
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.	



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Reproductive toxicity Additional information	<ul><li>Not classified.</li><li>Based on available data, the classification criteria are not met.</li></ul>
STOT-single exposure Additional information	<ul><li>Not classified.</li><li>Based on available data, the classification criteria are not met.</li></ul>
STOT-repeated exposure Additional information	<ul><li>Not classified.</li><li>Based on available data, the classification criteria are not met.</li></ul>
Aspiration hazard	: May be fatal if swallowed and enters airways.
SPOTCHECK ® SKL-SP2	
Viscosity, kinematic	3.3 mm²/s (@ 20°C)

Other information

: Likely routes of exposure: ingestion, inhalation, skin and eye.

## **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-Bonzonodicarboxylic acid. di-C8-10-bra	nebod alkul actors CO rich (68515-48-0)

	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])		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 I	Not established.	
12.3. BIOACCUMULATIVE POTENTIAL		
SPOTCHECK ® SKL-SP2		

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

## **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.

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



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14.3. TRANSPORT HAZARD CLASS(ES) ADR	
Transport hazard class(es) (ADR)	: Not regulated
IMDG	
Transport hazard class(es) (IMDG)	: Not regulated
ΙΑΤΑ	
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 1	O ANNEX II OF MARPOL AND THE IBC CODE

Not applicable

## **SECTION 15: REGULATORY INFORMATION**

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE 15.1.

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): Wassergefahrdungklasse (water hazard class): WGK 1 - Low hazard to waters TechnischeAnleitungLuft (TA-Luft): Class 5.2.5 Organic substances, except dusts.

#### CHEMICAL SAFETY ASSESSMENT 15.2.

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 Prepared by

: None.

: Nexreg Compliance Inc. 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	nic 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.			
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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

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

# Solvent-Removable Visible Penetrant

SPOTCHECK<sup>®</sup> 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





# 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**

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

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

## USER RECOMMENDATIONS

NDT Method	Penetrant Testing, Visible	
Storage temperature	10°C to 30°C	
Usage temperature	5°C to 55°C (bulk) -5°C to 50°C (aerosol)	
Coverage	20 - 30m² per litre 10 - 15m² per aerosol	
Cleaner/remover	SKC-S	
Hydrophilic emulsifier	ZR-10C	
Solvent-based developer	SKD-S2	
Water-based developer	ZP-5B	
Accessories	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.

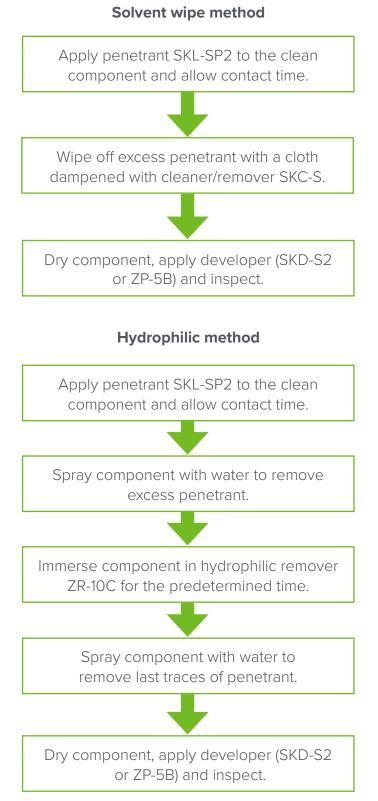
Apply a thin layer of developer\* to the surface and allow a minimum of 10 minutes development time before inspecting the component under white light. Indications will appear dark red against the white developer background.

\* 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.





# SKL-SP2

## 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 **<u>eu.magnaflux.com</u>**.



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

Version: 1.0

## 1.1. PRODUCT IDENTIFIER

Product form Product name Vaporizer

Main use category

- : Mixture
- : SPOTCHECK ® SKL-SP2 aerosol
- : Aerosol

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

## 1.2.1. Relevant identified uses

: Industrial use

: Non-Destructive Testing.

- Use of the substance/mixture
- 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 - 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)

	GHS02 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)	<ul> <li>H222 - Extremely flammable aerosol.</li> <li>H229 - Pressurised container: May burst if heated.</li> <li>H304 - May be fatal if swallowed and enters airways.</li> <li>H317 - May cause an allergic skin reaction.</li> </ul>
Precautionary statements (CLP)	<ul> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P211 - Do not spray on an open flame or other ignition source.</li> <li>P251 - Do not pierce or burn, even after use.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.</li> <li>P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.</li> </ul>
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.
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## Safety Data Sheet

Unknown acute toxicity (CLP) - SDS

Prepared according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

: 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))

: Contains 86.37 % of components with unknown hazards to the aquatic environment

Unknown hazards to the aquatic environment (CLP)

## 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)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**

#### **DESCRIPTION OF FIRST AID MEASURES** 4.1 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. : IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. First-aid measures after ingestion 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. : May be fatal if swallowed and enters airways. May be harmful if swallowed. May cause Symptoms/effects after ingestion 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 (CO2), 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.



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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. Elominate 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

Methods for cleaning up

surface water or sewer system. Wear recommended personal protective equipment. 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)				

## **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:

Not available.

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.



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## 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

9.1. INFORMATION ON DASIC FITTSIC	AL AND CHEMICAL PROPERTIES
Physical state	: Liquid
Appearance	: Red Aerosol
Colour	: Red
Odour	: Mild hydrocarbon
Odour threshold	: No data available
рН	: 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/cm3
Solubility	: Negligible.
Partition coefficient n-octanol/water	: 3.9 - 6 (distillates (petroleum), hydrotreated light naphthenic)
Viscosity, kinematic	: 3.3 mm²/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.



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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	<ul> <li>48.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)</li> <li>88.35% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)</li> <li>56.32% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Gas))</li> </ul>		
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.		
SECTION 12: ECOLOGICAL INFORMATION			
2.1. 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.	
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## 12.3. BIOACCUMULATIVE POTENTIAL

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

## 12.4. MOBILITY IN SOIL

Additional information

No additional information available

## 12.5. RESULTS OF PBT AND VPVB ASSESSMENT

No additional information available

## 12.6. OTHER ADVERSE EFFECTS

: 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			
Transpo	ort hazard class(es) (ADR)	:	2.1
Danger	labels (ADR)	:	
IMDG			
Transpo	ort hazard class(es) (IMDG)	:	2.1
IATA			
Transpo	ort hazard class(es) (IATA)	:	2.1
14.4.	PACKING GROUP		
-	g group (ADR)		Not applicable
-	g group (IMDG)		Not applicable
Packing	g group (IATA)	:	Not applicable
14.5.	ENVIRONMENTAL HAZARDS		
Danger	ous for the environment	:	No
Marine	pollutant	:	No
Other in	nformation	:	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 T	0	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): Wassergefahrdungklasse (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.

IBC code



Data sources

Other information

Prepared by

# SPOTCHECK ® SKL-SP2 - aerosol

## Safety Data Sheet

Prepared according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

: 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.

: None.

: Nexreg Compliance Inc. www.Nexreg.com



Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Catego	Aerosol, Category 1	
Aquatic Acute 1	Hazardous to th	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 4	Hazardous to th	Hazardous to the aquatic environment — Chronic Hazard, Category 4	
Asp. Tox. 1	Aspiration haza	Aspiration hazard, Category 1	
Skin Sens. 1	Skin sensitisatio	Skin sensitisation, Category 1	
H222	Extremely flam	Extremely flammable aerosol.	
H229	Pressurised cor	Pressurised container: May burst if heated.	
H304	May be fatal if s	May be fatal if swallowed and enters airways.	
H317	May cause an a	May cause an allergic skin reaction.	
H400	Very toxic to aq	Very toxic to aquatic life.	
H413	May cause long	May cause long lasting harmful effects to aquatic life.	
EUH066	Repeated expos	Repeated exposure may cause skin dryness or cracking.	
Classification and procedure u	sed to derive the classific	cation 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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