

SAFETY DATA SHEET



Version: 08

Revision date: 15/07/2012

According to (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY / UNDERTAKING

1.1 Product identifier:	Spotcheck SKC-S – aerosol.
1.2 Relevant identified uses of the mixture and uses advised against:	Solvent cleaner used in penetrant inspection.
1.3 Details of the supplier of the safety data sheet:	Magnaflux® (A Division of ITW Ltd), Faraday Road, South Dorcan Industrial Estate, Swindon, Wiltshire, SN3 5HE, UK. Telephone: +44 (0)1793 524566 Fax: +44 (0)1793 490459 Email: datasheets@magnaflux.co.uk Web: www.eu.magnaflux.com
1.4 Emergency telephone number:	+44 (0)1793 524566 (Office hours). (Office hours (GMT) Monday – Thursday 8:00am – 5:00pm, Friday 8:00am – 4:00pm).

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance:

According to Directive 67/548/EEC as amended & Directive 1999/45/EC:

Extremely flammable.

Irritating to eyes.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vapours may cause drowsiness and dizziness.

2.2 Label elements:

Hazard symbol(s):

F+, Extremely flammable.

Xi, Irritant.

N, Dangerous for the environment.



Pictograms:



Risk phrase(s):

R12

Extremely flammable.

R38

Irritating to skin.

R51/53

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67

Vapours may cause drowsiness and dizziness.

Safety phrase(s):

S9

Keep container in a well ventilated place.

S16

Keep away from sources of ignition – No smoking.

S23

Do not breathe vapour/spray.

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S24 Avoid contact with skin.
S51 Use only in well ventilated areas.

2.3 Other hazards:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
Vapours can form explosive mixtures with air.

3. COMPOSITION INFORMATION ON INGREDIENTS

Ingredient name	EC No	CAS No	REACH registration number	% W/W	Symbol	R phrases*
Hydrocarbons, C7-C9 Isoalkanes	921-728-3		01-2119471305-42	65-85	F, Xn, Xi, N	R65, R38, R11, R51/53, R67
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	927-241-2		01-2119471843-32	< 1	Xn	R10, R65, R66, R67, R52/53
Hydrocarbons, C3-4-rich petroleum distillate petroleum gas (1,3-butadiene < 0.1%)	270-990-9	68512-91-4	-	15-35	F+	R12

Note: Risk phrases in this section apply only to raw materials, not necessarily to finished products.

*See Section 16 for risk phrase text in full.

4. FIRST AID MEASURES

4.1 Description of first aid measures:

General advice: If symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance.

Eye contact: Flush eyes with large amounts of water for at least 15 minutes and seek immediate medical attention immediately.

Skin contact: Flush with water, use soap if available. Contaminated clothing should be washed before reuse. Seek medical attention if irritation persists.

Inhalation: Remove to fresh air. Keep at rest. If not breathing give artificial respiration. Seek medical attention if symptoms occur.

Ingestion: Unlikely route of exposure. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed:

Eye contact: May cause severe irritation to eyes.

Skin contact: Prolonged skin contact may cause redness and irritation.

Inhalation: In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion: Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Avoid vomiting and normal rinse of stomach because of risk of aspiration.

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4.3 Indication of any immediate medical attention and special treatment needed:

None known.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Carbon dioxide, foam, dry chemical, water fog or spray.

5.2 Special hazards arising from the mixture: Evacuate immediate area. Shut off 'fuel' to fire. If possible keep unaffected containers cool with water spray. Aerosols may explode in a fire. Aerosol contents are extremely flammable releasing smoke, soot and oxides of carbon on combustion. Burning vapour may give off toxic fumes.

5.3 Advice for firefighters: Warn fire-fighters that aerosols are involved. Self contained breathing apparatus and full protective clothing must be worn if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Shut off ignition sources and ensure adequate ventilation. Suitable protective equipment (including personal protective equipment referred to in Section 8 of the safety data sheet) should be worn to prevent any contamination of skin, eyes and personal clothing. Remove ignition sources and avoid breathing vapour/spray/mist.

6.2 Environmental precautions: Prevent liquid from entering drains sewers and watercourses. Notify the Environment Agency or water authorities if a major spillage occurs. Prevent contamination of soil.

6.3 Methods and material for containment and cleaning up: Eliminate sources of ignition. Ventilate surrounding area. Contain spilled liquid with sand or earth. Mop up or absorb onto with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13). Large spills should be pumped (using an earthed explosion proof pump) into containers pending disposal according to local/national regulations (see Section 13). Take measures to prevent the build up of electrostatic charge.

6.4 Reference to other sections: For Personal Protective Equipment see Section 8. For disposal information see Section 13.

7. HANDLING & STORAGE

7.1 Precautions for safe handling: Aerosol contents are highly flammable and volatile. Keep away from sources of ignition – no smoking. Wear suitable protective clothing such as chemical resistant gloves, apron and goggles/face mask to protect from splashes. Avoid contact with the skin. Do not breathe product spray or mist. Ensure adequate exhaust ventilation when in use. Take measures to prevent the build-up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities: Store in a cool dry area away from heat and sources of ignition. Recommended storage temperature: 10 °C to 30 °C. Keep containers out of direct sunlight. Keep containers closed when not in use. Rotate stock and check regularly for damaged items.

7.3 Specific end use(s): Use only for Non Destructive Testing (NDT) applications.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Components with workplace control parameters:

Occupational exposure figures have been set for some of the components of this preparation based on EH-40 (latest revision) or manufacturers' recommendation.

Name	STD	TWA – 8 Hrs		STEL – 15 min		Notes
Hydrocarbons, C7-C9, isoalkanes		300 ppm	1400 mg/m ³			
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics		226 ppm	1200 mg/m ³			Source - supplier

Note: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

Derived No Effect Level (DNEL) / Derived Minimal Effect Level (DMEL):

Hydrocarbons, C7-C9, isoalkanes

Industry	Dermal	Long Term	773	mg/kg/day
Industry	Inhalation.	Long Term	2035	mg/m ³
Consumer	Dermal	Long Term	699	mg/kg/day
Consumer	Inhalation.	Long Term	608	mg/m ³
Consumer	Oral	Long Term	699	mg/kg/day

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Industry	Dermal	Long Term	300	mg/kg/day
Industry	Inhalation.	Long Term	1500	mg/m ³
Consumer	Dermal	Long Term	300	mg/kg/day
Consumer	Inhalation.	Long Term	900	mg/m ³
Consumer	Oral	Long Term	300	mg/kg/day

Note: The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

8.2 Exposure controls:

Concentrations of product vapours and mists in the working atmosphere must be kept as low as is reasonably practicable. Exposure should be minimised by the use of appropriate containment, engineering control and ventilation measures. Where this is not possible, personal protective equipment should be worn as indicated below where appropriate.

Occupational exposure controls:

Eye/face protection: Safety glasses with side-shields conforming to EN166.

Hand/skin protection: Use chemical resistant gloves recommended by glove manufacturer as being suitable for isoparaffins, if hand exposure is unavoidable. Marigold blue nitrile, Long Nitrosolve or Green Supersolve (breakthrough time 480 minutes, permeation rate 96 mg/m² after breakthrough, degradation level

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2) are suitable, although other types may be more suitable in other circumstances.

The selected protective gloves are required to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection:

Wear chemical resistant overalls if skin contact is likely. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection:

Use a respirator type ABEK (EN 14387) filter cartridge if spraying in confined or unventilated areas.

For nuisance exposures use type P1 (EU EN 143) particle respirator. For higher level protection use type ABEK-P3 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under CEN standards.

Environmental exposure controls: Avoid any release to the environment.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

APPEARANCE	:	Aerosol containing mobile clear liquid.
ODOUR	:	Mild hydrocarbon.
pH	:	Neutral.
BOILING POINT	:	113-143 °C.
MELTING POINT	:	No data available.
FLASH POINT (PMCC)	:	-40 °C (Aerosol propellant).
FLAMMABILITY (Limits in Air)	:	0.7-6% (Vol %).
AUTOFLAMMABILITY	:	> 200 °C.
EXPLOSIVE PROPERTIES	:	No data available.
OXIDISING PROPERTIES	:	No data available.
VAPOUR PRESSURE	:	1.627 kPa @ 20 °C.
VAPOUR DENSITY (Air = 1)	:	> 1.
RELATIVE DENSITY	:	0.72 g/cm ³ .
SOLUBILITY IN WATER	:	Negligible.
PARTITION COEFFICIENT		
n-octanol/water	:	No data available.
EVAPORATION RATE (BuAc = 100)	:	155.
VISCOSITY (ASTM D-445)	:	< 0.86 cS @ 25 °C.

Note: Properties related to the bulk product only unless otherwise stated.

9.2 Other information:

No other information.

10. STABILITY & REACTIVITY

10.1 Reactivity: No data available.

10.2 Chemical stability: Stable under normal conditions of use and applications.

10.3 Possibility of hazardous reaction: No data available.

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- 10.4. Conditions to avoid:** Keep away from sources of ignition, hot surfaces, direct sun light and moisture.
- 10.5. Incompatible materials:** Strong oxidising agents.
- 10.6. Hazardous decomposition products:** None under normal conditions of storage and use. Smoke, soot, oxides of carbon on combustion.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

- Acute toxicity:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Acute Toxicity (Oral LD50) > 5000 mg/kg Rat (OECD 401).

Acute Toxicity (Dermal LD50) > 2000 mg/kg Rabbit (OECD 402).

Acute Toxicity (Inhalation LC50) > 21 mg/l (vapours) Rat 4 hours (OECD 403).
- Skin corrosion/irritation:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Skin – Rabbit – Irritating – (OECD 404).
- Eye corrosion/irritation:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Eye – Rabbit – Non irritating – (EPA OPPTS 870.2400).
- Sensitisation:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Skin – Guinea Pig – Non sensitising – (OECD 406).
- Repeated dose toxicity:** No data available.
- Carcinogenicity:** No data available.
- Germ cell mutagenicity:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Negative with and without metabolic activation - (OECD 471).
- Toxicity for reproduction:** **HYDROCARBONS, C7-C9 ISOALKANES:**
Rat – no adverse effects on reproduction – (OECD 416).

Potential health effects:

- Inhalation:** Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.
- Ingestion:** Not a likely route of entry, however, ingestion may cause irritation of the mouth, throat and digestive track. Small amounts of product aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.
- Eye contact:** Irritating to eyes. May cause redness and pain.
- Skin contact:** Frequent or prolonged contact with the product may produce irritation and/or skin dryness and cracking. Product will have a de-fattiging effect on the skin.

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12. ECOLOGICAL INFORMATION

Based on data for component materials.

12.1 Toxicity:

HYDROCARBONS, C7-C9, ISOALKANES:

Acute Toxicity – Fish - LC50 96 hours 18.4 mg/l
Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates EC50 48 hours
2.4 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants EC50 72 hours 29 mg/l
Scenedesmus subspicatus

Chronic Toxicity - Aquatic Invertebrates NOEC 21 days
0.17 mg/l Daphnia magna

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

The product is immiscible with water and will spread on the water surface.

12.5 Results of PBT and vPvB assessment: This product does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Other adverse effects:

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with local, state or national legislation.

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14. TRANSPORT INFORMATION

This product is packed in accordance with the Limited Quantity Provisions of ADR, IMDG, and IATA. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30 kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities.

14.1 UN number:

ADR/RID: 1950 IMDG: 1950 IATA: 1950

14.2 UN proper shipping name:

Aerosols, flammable.
Aerosols, flammable.
Aerosols, flammable.

14.3 Transport hazard class(es):

ADR/RID: 2.1 IMDG: 2.1 IATA: 2.1

14.4 Packaging group:

ADR/RID: N/A IMDG: N/A IATA: N/A

14.5 Environmental hazards:

ADR/RID: Yes IMDG: Marine Pollutant: Yes IATA: Yes

14.6 Special precautions for user:

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not applicable.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

No data available.

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

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16. OTHER INFORMATION

Risk phrases and safety phrases in full:

- R11 Highly flammable.
R12 Extremely flammable.
R38 Irritating to skin.
R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R65 Harmful: May cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.
- S9 Keep container in a well ventilated space.
S16 Keep away from sources of ignition – No smoking.
S23 Do not breathe vapour/spray.
S24 Avoid contact with skin.
S29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
S51 Use only in well ventilated areas.

Extra label elements according to Aerosol Dispenser Directive 75/324/EC:

*Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.*

Preparations classified as harmful on the basis of an aspiration hazard need not be labelled as harmful with R65 when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment. (EU-Directive 67/548 Annex VI 9.4).

Regulatory references:

- Chemical (Hazard Information & Packaging for Supply) Regulations 2009 Chemicals (CHIP 4).
- Commission regulation (EU) 453/2010.
- Control of Substances Hazardous to Health Regulations 2002.
- Dangerous Substances Directive 67/548/EEC as modified.
- Dangerous Preparations Directive 1999/45/EC.
- EC Directive 91/155/EEC.
- Hazardous waste regulations 2005.
- Health & Safety at Work Act 1974.
- Occupational Exposure Limits EH40/2005.
- REACH Directive (EC) 1907/2006.
- The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011.

DISCLAIMER

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391/EEC and 98/24/EC.

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Revision Summary:

Replaces Rev 07 (04/01/2011). Safety Data Sheet update in compliance with the requirements of Regulation (EC) No. 1907/2006 and Regulation (EU) No. 453/2010.