

01-5920-48

# MAGNAFLUX®

A Division of Illinois Tool Works Inc.

## MATERIAL SAFETY DATA SHEET

SPOTCHECK® DEVELOPER SKD-S2

### 1. IDENTIFICATION

Company: MAGNAFLUX  
 Address: 3624 West Lake Avenue, Glenview, Illinois 60025  
 Telephone No.: 847-657-5300 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-9300).  
 Product Use: Penetrant inspection developer  
 Packages: 1 gallon can, 5 gallon pail, 55 gallon drum, aerosol  
 NFPA Rating: Health 1, Flammability 3, (aerosol 4), Reactivity 0  
 PIN (Canada): UN 1993  
 Revision Date: October 25, 2001

### 2. HAZARDOUS INGREDIENTS

Ingredient	Wt./Vol. %	CAS #	TLV	PEL	LD <sub>50</sub>	iC <sub>50</sub>
2-propanol (Isopropanol)	40-70	67-63-0	400 ppm	400 ppm	3.6 g/kg (oral/mouse)	not avail.
2-propanone (Acetone)	10-30	67-64-1	750 ppm	750 ppm	6 g/kg (oral/rat)	not avail.
Isobutane (propellant)	30	75-28-5	not avail.	1000 ppm	not avail.	not avail.

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**  
 Extremely flammable white liquid and aerosol. Fast evaporating vapors can reach hazardous levels quickly in unventilated spaces.

#### POTENTIAL HEALTH EFFECTS & SIGNS AND SYMPTOMS OF EXPOSURE:

**Skin Contact:** Can irritate by removing natural skin oils on long or repeated exposures.  
**Eyes:** Irritating, but does not damage eye tissue.  
**Inhalation:** Causes dizziness and nausea.  
**Ingestion:** Not significant in small (mouthful) amounts.  
**Medical conditions known to be aggravated by exposure to product:** None

### 4. FIRST AID

**Skin Contact:** Wash off with soap and water. Use soothing lotion.  
**Eyes:** Rinse carefully under upper and lower eyelids using plenty of water.  
**Inhalation:** Remove to fresh air if dizzy or nauseated.  
**Ingestion:** Do not induce vomiting. Accidental ingestion of a single mouthful is not expected to cause significant harm.  
**NOTE:** In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison control center.

### 5. FIRE HAZARD

**Conditions of flammability:** Bulk and aerosol: Ignition will occur if used near flames, arcs or other ignition sources.  
**Flash point:** 2°F (-16°C) (Pensky-Martens closed cup).  
**Flammable limits in air:** 2% to 15%.  
**Extinguishing media:** Carbon dioxide, foam, water.  
**Special fire fighting procedures:** Keep containers cool with water spray.  
**Hazardous combustion products:** Soot, oxides of carbon.  
**Unusual fire hazards:** Aerosol cans may burst over 130°F (54°C) and add to existing fire.

### 6. ACCIDENTAL RELEASE MEASURES

Turn off or remove sources of ignition. Mop up or sweep up with absorbent. (For disposal, see Section 13.)

### 7. HANDLING AND STORAGE

Avoid breathing vapors. Avoid eye contact. Avoid repeated or prolonged skin contact. Store away from heat source. Do not spray around arcs or flame.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Controls:** Use where ventilation will carry vapors away from occupied areas.  
**Personal protection :** Wear safety glasses to protect eyes. Wear nitrile rubber gloves if hand exposure is unavoidable. Respirator with filter if sprayed in enclosed, unventilated space.

9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk)</i>	Min. 456°F (230°C) (ASTM D-86)	<i>Vapor pressure:</i>	Aerosol: 60 psi @ 76°F (24°C) Bulk: <0.10 mm @ 70°F (21°C)
<i>Percent volatile:</i>	None (30% in aerosol)	<i>Vapor density:</i>	Heavier than air
<i>Density/sp. gravity:</i>	0.89	<i>Evaporation rate:</i>	Negligible
<i>Water solubility:</i>	0	<i>Appearance:</i>	Dark red oily liquid
<i>pH:</i>	Neutral	<i>Odor:</i>	Mild oily odor

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	None
<i>Hazardous decomposition products:</i>	Soot, oxides of carbon and nitrogen when burning
<i>Reactivity:</i>	None

11. **TOXICOLOGICAL INFORMATION**

*Carcinogenicity:* Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.  
*Threshold limited value:* 5 mg/m<sup>3</sup> for oily mist.  
*WHMIS information (Canada):* No human information is available for teratogenicity, reproductive toxicity, and mutagenicity. No reports of toxicological synerism were located. The ingredients have not been found to show skin sensitization.

12. **ECOLOGICAL INFORMATION**

No data is available on SKL-SP1. It floats on water and can be skimmed off. Its low vapor pressure may exempt it from VOC restrictions. The hydrocarbon propellant is not an ozone depleter.

13. **DISPOSAL**

As a non-hazardous oil waste, incinerate or send to waste handler who can blend it into secondary fuels. Empty aerosol cans before disposal.

14. **TRANSPORTATION**

U.S. DOT: 49 CFR 172.101 Hazardous Materials Table

	<u>1 gal, 5 gal</u>	<u>20 gal, 55 gal, &amp; Totes</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	None, not restricted	Consumer commodity
<i>Hazard class or division:</i>	None	None	ORM-D
<i>Identification No.:</i>	None	None	None
<i>Packing Group:</i>	None	None	None

IATA: List of Dangerous Goods

	<u>1 gal, 5 gal</u>	<u>Bulk</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	None, not restricted	Aerosols, flammable
<i>Hazard class or division:</i>	None	None	2.1
<i>Identification No.:</i>	None	None	UN1950
<i>Packing Group:</i>	None	None	—

IMDG: General Index

	<u>1 gal, 5 gal</u>	<u>Bulk</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	None, not restricted	None, not restricted	AEROSOLS
<i>Hazard class or division:</i>	None	None	2.1
<i>Identification No.:</i>	None	None	UN1950
<i>Packing Group:</i>	None	None	—

15. **REGULATORY INFORMATION**

*TSCA:* All ingredients are listed in TSCA inventory  
*CERCLA:*  
*SARA TITLE III, Section 313:*  
*WHMIS Class (Canada):* Bulk: D-2A Aerosol: A, B-5, D-2A  
*Note:* This MSDS has been prepared to meet WHMIS (Canada) requirements with the exception of using 15 headings.

16. **OTHER INFORMATION**

*Revision Statement:* Sections: 2, 5  
*Supersedes:* 12/7/01  
*Prepared by:* Shawn Kilty, Research Chemist

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**MATERIAL SAFETY DATA SHEET**SPOTCHECK<sup>®</sup> PENETRANT SKL-SP1

1. **Company:** MAGNAFLUX  
**Address:** 3624 West Lake Avenue, Glenview, Illinois 60025  
**Telephone No.:** 847-667-5300 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-9300).  
**Product Use:** Visible inspection penetrant.  
**Packages:** 1 gallon and 5 gallon pails, 20 gallon drums, 55 gallon drums, Totes, aerosols.  
**NFPA Rating:** Health 1, Flammability 1, (Aerosol Flammability 4), Reactivity 0  
**PIN (Canada):** None  
**Revision date:** August 15, 2003

2. **HAZARDOUS INGREDIENTS**

<u>Ingredient</u>	<u>Wt/Wt %</u>	<u>CAS #</u>	<u>TLV</u>	<u>PEL</u>	<u>LD<sub>50</sub></u>	<u>LC<sub>50</sub></u>
White mineral oil (petroleum)	60-80	64742-47-8	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	not avail.	not avail.
Phthalic Ester	5-25	71888-89-6	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	Not Avail.	Not Avail.
Isobutane (propellant)*	30	75-28-5	not avail.	1000 ppm	not avail.	not avail.

\*Aerosol Package Only

3. **HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

Bland, oily liquid which may irritate the skin and eyes. Bulk material is difficult to ignite, but will burn vigorously if engulfed in fire. Aerosol is extremely flammable.

**POTENTIAL HEALTH EFFECTS, AND SIGNS AND SYMPTOMS OF EXPOSURE:**

- Skin contact:** Can irritate by removing natural skin oils on long or repeated exposures.  
**Eyes:** May irritate.  
**Inhalation:** Not significant at room temperatures. When heated or sprayed, vapors may cause dizziness and nausea.  
**Ingestion:** Not significant in small (mouthful) amounts.  
**Medical conditions known to be aggravated by exposure to product:** None

4. **FIRST AID**

- Skin Contact:** Wash off with soap and water. Use soothing lotion.  
**Eyes:** Rinse carefully under upper and lower eyelids using plenty of water.  
**Inhalation:** Remove to fresh air if dizzy or nauseated.  
**Ingestion:** Do not induce vomiting. Accidental ingestion of a small mouthful is not expected to cause significant harm.  
**NOTE:** In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison control center.

5. **FIRE HAZARD**

- Conditions of flammability:** Aerosol: Spraying near an ignition source will ignite spray mist.  
 Bulk: None unless heated over 200°F (93°C) near ignition source.  
**Flash point (Bulk):** Min. 200°F (93°C) (Pensky-Martens closed cup)  
**Flammable limits in air:** 1% to 6%  
**Extinguishing media:** Carbon dioxide, foam  
**Special fire fighting procedures:** Keep containers cool with water spray. Do not spray water directly on burning SKL-SP1. It may float and spread the fire.  
**Hazardous combustion products:** Smoke, soot, oxides of carbon and nitrogen.  
**Unusual fire hazards:** Aerosol cans may burst at temperatures over 130°F (54°C) and spray contents into a fire.

6. **ACCIDENTAL RELEASE MEASURES**

Mop up or sweep up with absorbent. (For disposal, see Section 13.)

7. **HANDLING AND STORAGE**

Store away from heat source. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid breathing spray mist. Do not spray around arcs or flames.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Controls:** None, unless sprayed. Use where ventilation will carry spray mist away from occupied areas.  
**Personal protection:** Wear safety glasses to protect eyes. Wear nitrile rubber gloves if hand exposure is unavoidable. Respirator with filter if sprayed in enclosed unventilated space.

9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk):</i>	132° F (55°C) (ASTM D-86)	<i>Vapor pressure:</i>	Bulk: 150mm @ 100°F (38°C). Aerosol: 65 psi @ 75°F (24°C)
<i>Percent volatile:</i>	90%	<i>Vapor density:</i>	3
<i>Density/sp. gravity:</i>	0.87	<i>Evaporation rate:</i>	0.4 of ether
<i>Water solubility:</i>	90	<i>Appearance:</i>	White liquid
<i>pH:</i>	Neutral	<i>Odor:</i>	Alcohol odor

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	None
<i>Hazardous decomposition products:</i>	When burning, soot, oxides of carbon
<i>Reactivity:</i>	None

11. **TOXICOLOGICAL INFORMATION**

*Carcinogenicity:* Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.  
*Threshold limit value (Bulk):* 400 ppm  
*WHMIS information (Canada):* According to available information, the ingredients have not been found to show reproductive toxicity, teratogenicity, mutagenicity, skin sensitization, or synergistic toxic effects with other materials.

12. **ECOLOGICAL INFORMATION**

No data is available on SKD-S2.

13. **DISPOSAL**

Send to a licensed waste facility for proper disposal.  
*RCRA:* Hazardous waste.  
*U.S. EPA Waste Number:* D001

14. **TRANSPORTATION**

U.S. DOT: 49 CFR 172.101 Hazardous Materials Table

<i>Proper shipping name:</i>	<u>Bulk</u> Flammable Liquid, n.o.s. (Isopropanol, acetone)	<u>Aerosol</u> Consumer commodity
<i>Hazard class or division:</i>	3	ORM-D
<i>Identification No.:</i>	UN1993	None
<i>Packing Group:</i>	II	None

<i>IATA: List of Dangerous Goods</i>	<u>Bulk</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	Flammable liquid, n.o.s. (Isopropanol, Acetone)	Aerosols, flammable
<i>Hazard class or division:</i>	3	2.1
<i>Identification No.:</i>	UN1993	UN1950
<i>Packing Group:</i>	II	-

<i>IMDG: General Index</i>	<u>Bulk</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL, ACETONE)	AEROSOLS
<i>Hazard class or division:</i>	3.2	2.1
<i>Identification No.:</i>	UN1993	UN1950
<i>Packing Group:</i>	II	-

15. **REGULATORY INFORMATION**

*TSCA:* All ingredients are listed in TSCA inventory.  
*CERCLA:* Reportable quantity (RQ) for Acetone = 5000 lbs.  
*SARA TITLE III, Section 313:* Acetone.  
*California Proposition 65:* Contains nothing on this list  
*WHMIS Class (Canada):* Bulk: B-2, D-2B - Aerosol: A, B-5, D-2B  
*Note:* This MSDS has been prepared to meet WHMIS (Canada) requirements with the exception of using 16 headings.

16. **OTHER INFORMATION**

*Revision Statement:* Review Update  
*Supersedes:* MSDS dated 5/4/99

*Prepared by:* Tamie Simmons, R&D Manager

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# MAGNAFLUX®

A Division of Illinois Tool Works Inc.

## MATERIAL SAFETY DATA SHEET

SPOTCHECK® CLEANER/REMOVER SKC-S

### 1. IDENTIFICATION

**Company:** MAGNAFLUX  
**Address:** 3624 West Lake Avenue, Glenview, Illinois 60025  
**Telephone No.:** 847-657-5300 (Off-Hour Emergency Number - CHEMTREC - 1-800-424-9300).  
**Product Use:** Wipe on solvent cleaner/remover for penetrant inspection  
**Packages:** 1 gallon can, 5 gallon pail, 55 gallon drums, aerosols  
**NFPA Rating:** Health 1, Flammability 3, Reactivity 0  
**PIN (Canada):** Bulk: UN1268  
**Revision Date:** April 22, 2002

### 2. HAZARDOUS INGREDIENTS

<i>Ingredient</i>	<i>WT/WL %</i>	<i>CAS#</i>	<i>TLV</i>	<i>PEL</i>	<i>LD<sub>50</sub></i>	<i>LC<sub>50</sub></i>
Light aliphatic solvent naphtha	60-100	64742-89-8	300ppm (8 hr.TWA)	not avail.	5 g/kg (oral/rat)	3400 ppm (4hrs/rat)
Carbon dioxide (propellant) (for 12 oz. and 16 oz. aerosol)	3-7	124-38-9	not avail.	5000 ppm	not avail.	not avail.

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**  
Flammable liquid and aerosol. Irritating to skin, eyes, and respiratory tract.

#### POTENTIAL HEALTH EFFECTS & SIGNS AND SYMPTOMS OF EXPOSURE:

**Skin Contact:** Can irritate by removing natural skin oils on long or repeated exposures.  
**Eyes:** Irritating.  
**Inhalation:** Dizziness and nausea.  
**Ingestion:** Not significant in small (mouthful) amounts.  
**Medical conditions known to be aggravated by exposure to product:** None

### 4. FIRST AID

**Skin Contact:** Wash off with soap and water. Use soothing lotion.  
**Eyes:** Rinse carefully under upper and lower eyelids using plenty of water.  
**Inhalation:** Remove to fresh air if dizzy or nauseated.  
**Ingestion:** Do not induce vomiting. Accidental ingestion of a small mouthful is not expected to cause significant harm.  
**NOTE:** In all severe cases, contact physician immediately. Local telephone operators can furnish number of regional poison-control center.

### 5. FIRE HAZARD

**Conditions of flammability:** Bulk and aerosol: Readily ignited in presence of ignition sources.  
**Flash point:** Min. 50°F (10°C) (Pensky-Martens) closed cup.  
**Flammable limits in air:** 1% to 6%.  
**Extinguishing media:** Carbon dioxide, foam  
**Special fire fighting procedures:** Keep containers cool with water spray. Do not spray water directly on burning SKC-S. It will float and spread the fire.  
**Hazardous combustion products:** Smoke, soot, oxides of carbon.  
**Unusual fire hazards:** Aerosol cans may burst if heated above 130°F (54°C) and spray contents into a fire.

### 6. ACCIDENTAL RELEASE MEASURES

Mop up or sweep up with absorbent. (For disposal, see Section 13.)

### 7. HANDLING AND STORAGE

Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid breathing spray mist. Do not spray near arcs or flames.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Controls:** Use where ventilation will carry spray mist away from occupied areas.  
**Personal protection:** Wear safety glasses to protect eyes. Wear nitrile rubber gloves if hand exposure is unavoidable.  
Respirator with solvent vapor absorbing cartridge if used in enclosed, unventilated space.

9. **PHYSICAL PROPERTIES**

<i>Initial boiling point (bulk):</i>	Min. 240°F (116°C) (ASTM D-86)	<i>Vapor pressure:</i>	12 and 16 oz. Aerosol: 105psi @ 75°F(24°C) Bulk: 30mm @ 70°F (21°C)
<i>Percent volatile:</i>	99.9 (EPA Method 24)	<i>Vapor density:</i>	Heavier than air
<i>Density/sp. gravity:</i> 0.76	<i>Evaporation rate:</i>	<i>Fast</i>	
<i>Water solubility:</i>	0	<i>Appearance:</i>	Clear, colorless liquid
<i>pH:</i>	Neutral	<i>Odor:</i>	Naphtha odor

10. **STABILITY AND REACTIVITY**

<i>Stability:</i>	Stable
<i>Incompatibility:</i>	None
<i>Hazardous decomposition products:</i>	Soot, oxides of carbon when burning
<i>Reactivity:</i>	None

11. **TOXICOLOGICAL INFORMATION**

<i>Carcinogenicity:</i>	Contains no known or suspected carcinogens listed with OSHA, IARC, NTP, or ACGIH.
<i>Threshold limit value:</i>	300 ppm
<i>WHMIS information (Canada):</i>	According to available information, the ingredients have not been found to show reproductive toxicity, teratogenicity, mutagenicity, skin sensitization, or synergistic toxic effects with other materials.

12. **ECOLOGICAL INFORMATION**

No data is available on SKC-S. It floats on water and evaporates away. It is 100% VOC.

13. **DISPOSAL**

As hazardous waste, send to licensed waste handler who can blend it into secondary fuels.

<i>RCRA:</i>	Hazardous waste.
<i>U.S. EPA Waste Number:</i>	D001

14. **TRANSPORTATION**

U.S. DOT: 49 CFR 172.101 Hazardous Materials Table

	<u>Bulk</u>	<u>Aerosol</u>
<i>Proper shipping name:</i>	Petroleum distillates, n.o.s.	Consumer Commodity
<i>Hazard class or division:</i>	3	ORM-D.
<i>Identification No.:</i>	UN1268	None
<i>Packing Group:</i>	II	None

	<u>Bulk</u>	<u>Aerosol</u>
<i>IATA: List of Dangerous Goods</i>		
<i>Proper shipping name:</i>	Petroleum distillates, n.o.s.	Aerosols, flammable
<i>Hazard class or division:</i>	3	2.1
<i>Identification No.:</i>	UN1268	UN1950
<i>Packing Group:</i>	II	-

	<u>Bulk</u>	<u>Aerosol</u>
<i>IMDG: General Index</i>		
<i>Proper shipping name:</i>	PETROLEUM DISTILLATES, N.O.S.	AEROSOLS
<i>Hazard class or division:</i>	3.2	2.1
<i>Identification No.:</i>	UN1268	UN1950
<i>Packing Group:</i>	II	-

14. **REGULATORY INFORMATION**

<i>TSCA:</i>	All ingredients are listed in TSCA inventory.
<i>CERCLA:</i>	Not reportable
<i>SARA TITLE III, Section 313:</i>	No reportable ingredients
<i>California Proposition 65:</i>	Contains nothing on this list
<i>WHMIS Class (Canada):</i>	Bulk: B-2, D-2B; Aerosol: A, B-5, D-2B

**Note:** This MSDS has been prepared to meet WHMIS (Canada) requirements with the exception of using 16 headings.

15. **OTHER INFORMATION**

<i>Revision Statement:</i>	Updated Sections #1, #2, and #9.
<i>Supersedes:</i>	MSDS dated 10/26/01
<i>Prepared by:</i>	Patricia Sebring, Technical Support Chemist