

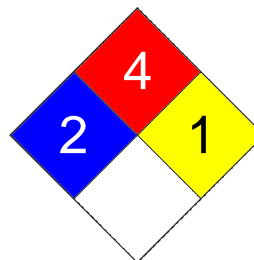
MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name Marsh Black Spray Stencil Ink
CAS # Mixture
Product use Spray Ink
Manufacturer MSSC, LLC
926 McDonough Lake Road, Unit E
Collinsville, IL 62234 US
Phone: (618) 343-1006
Fax: (618) 343-1016
Emergency Phone: (800) 424-9300 (USA)
Emergency Phone: (703) 527-3887 (International)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 2
Flammability	4
Physical Hazard	1
Personal Protection	B



2. Hazards Identification

Emergency overview DANGER
Extremely flammable. Contents under pressure. Containers may explode when heated. Eye and skin irritant. May cause chronic toxic effects. Contains material which may cause cancer.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation.

Eyes May cause irritation. Contact with liquid may cause frostbite.

Skin May cause irritation. Contact with liquid may cause frostbite.

Inhalation Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

Ingestion Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Solvent naphtha (petroleum), light aliphatic	64742-89-8	7 - 13
Acetone	67-64-1	30 - 60
Butane	106-97-8	10 - 30
Propane	74-98-6	10 - 30
Hydrous magnesium silicate	14807-96-6	1 - 5
2-Propanol, 1-methoxy-, acetate	108-65-6	0.5 - 1.5
Carbon black	1333-86-4	0.5 - 1.5
1,2,4-Trimethylbenzene	95-63-6	0.1 - 1

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists. Clothing frozen to the skin should be thawed before being removed.
Inhalation	If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.
Ingestion	Not a normal route of exposure. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician

Symptoms may be delayed.

General advice

Do not puncture or incinerate container. Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties Flammable by WHMIS/OSHA criteria. Containers may explode when heated.

Extinguishing media

Suitable extinguishing media Carbon dioxide. Alcohol foam. Dry chemical. Water Fog.

Unsuitable extinguishing media Not available

Protection of firefighters

Specific hazards arising from the chemical Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.

Protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products May include and are not limited to: Oxides of carbon. Phosgene.

Explosion data

Sensitivity to mechanical impact Not available

Sensitivity to static discharge Not available

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite. Never return spills in original containers for re-use. Should not be released into the environment.

7. Handling and Storage

Handling Use good industrial hygiene practices in handling this material.

Storage Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition. Store in a tightly closed container.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
1,2,4-Trimethylbenzene	ACGIH-TLV TWA: 25 ppm OSHA-PEL TWA: 25 ppm
2-Propanol, 1-methoxy-, acetate	ACGIH-TLV Not established OSHA-PEL Not established
Acetone	ACGIH-TLV TWA: 500 ppm STEL: 750 ppm OSHA-PEL TWA: 1000 ppm
Butane	ACGIH-TLV TWA: 1000 ppm OSHA-PEL Not established
Carbon black	ACGIH-TLV TWA: 3.5 mg/m ³ OSHA-PEL TWA: 3.5 mg/m ³
Hydrous magnesium silicate	ACGIH-TLV TWA: 2 mg/m ³ OSHA-PEL Not established
Propane	ACGIH-TLV TWA: 1000 ppm OSHA-PEL TWA: 1000 ppm
Solvent naptha (petroleum), light aliphatic	ACGIH-TLV Not established OSHA-PEL Not established

Engineering controls

Use only under good ventilation conditions or with respiratory protection.

Personal protective equipment

Eye / face protection

Safety goggles or glasses.

Hand protection

Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection

As required by employer code.

Respiratory protection

Not normally required if good ventilation is maintained and exposure guidelines are not exceeded. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Aerosol.
Color	Black
Form	Spray
Odor	Solvent.
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not determined
Pour point	Not available
Evaporation rate	< 1 (Ether = 1)
Flammability limits in air, lower, % by volume	1.8
Flammability limits in air, upper, % by volume	12.8
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Auto-ignition temperature	Not determined
Percent volatile	Not available

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C (120.2°F).
Incompatible materials	Strong acids, alkalies and oxidizing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Phosgene.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
1,2,4-Trimethylbenzene	3661 ppm rat
2-Propanol, 1-methoxy-, acetate	Not available
Acetone	Not available
Butane	Not available
Carbon black	Not available
Hydrous magnesium silicate	Not available
Propane	Not available
Solvent naphtha (petroleum), light aliphatic	1400 mg/l/4h rat

Component analysis - Oral LD50

Ingredient(s)	LD50
1,2,4-Trimethylbenzene	3280 mg/kg rat
2-Propanol, 1-methoxy-, acetate	8532 mg/kg rat
Acetone	5800 mg/kg rat; 5340 mg/kg rabbit; 3000 mg/kg mouse; 2857 mg/kg human
Butane	Not available
Carbon black	8000 mg/kg rat
Hydrous magnesium silicate	Not available
Propane	Not available
Solvent naptha (petroleum), light aliphatic	5000 mg/kg rat

Effects of acute exposure

Eye	May cause irritation. Contact with liquid may cause frostbite.
Skin	May cause irritation. Contact with liquid may cause frostbite.
Inhalation	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
Ingestion	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

Sensitization

Non-hazardous by WHMIS/OSHA criteria.

Chronic effects

Fibrosis was observed in rats exposed to 6 mg/m3 of hydrous magnesium silicate (talc) for 113 or 122 weeks. Chronic respiratory disease has been observed in workers exposed to up to 3.0 mg/m3 of airborne talc ore free of asbestos and silica.

Carcinogenicity

Contains a potential carcinogen.

ACGIH - Threshold Limit Values - Carcinogens

Acetone	67-64-1	A4 - Not Classifiable as a Human Carcinogen
Carbon black	1333-86-4	A4 - Not Classifiable as a Human Carcinogen
Hydrous magnesium silicate	14807-96-6	A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers)

IARC - Group 2B (Possibly Carcinogenic to Humans)

Carbon black	1333-86-4	Monograph 93 [in preparation]; Monograph 65 [1996]
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IARC - Group 3 (Not Classifiable)

Hydrous magnesium silicate	14807-96-6	Monograph 93 [in preparation] (inhaled); Supplement 7 [1987]; Monograph 42 [1987]
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U.S. - California - Proposition 65 - Carcinogens List

Carbon black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
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Mutagenicity

Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects

Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity

Non-hazardous by WHMIS/OSHA criteria.

Synergistic Materials

Not available

12. Ecological Information**Ecotoxicity**

Components of this product have been identified as having potential environmental concerns.

Ecotoxicity - Freshwater Algae Data

Solvent naptha (petroleum), light aliphatic	64742-89-8	72 Hr EC50 Pseudokirchneriella subcapitata: 4700 mg/L
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Ecotoxicity - Freshwater Fish Species Data

1,2,4-Trimethylbenzene	95-63-6	96 Hr LC50 Pimephales promelas: 7.19-8.28 mg/L [flow-through]
2-Propanol, 1-methoxy-, acetate	108-65-6	96 Hr LC50 Pimephales promelas: 161 mg/L [static]
Acetone	67-64-1	96 Hr LC50 Oncorhynchus mykiss: 4.74-6.33 ml/L; 96 Hr LC50 Pimephales promelas: 6210-8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L
Hydrous magnesium silicate	14807-96-6	96 Hr LC50 Brachydanio rerio: >100 g/L [semi-static]

Ecotoxicity - Microtox Data

Acetone	67-64-1	15 Min EC50 Photobacterium phosphoreum: 14500 mg/L
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Ecotoxicity - Water Flea Data

1,2,4-Trimethylbenzene	95-63-6	48 Hr EC50 Daphnia magna: 6.14 mg/L
2-Propanol, 1-methoxy-, acetate	108-65-6	48 Hr EC50 Daphnia magna: >500 mg/L
Acetone	67-64-1	48 Hr EC50 Daphnia magna: 10294 - 17704 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 - 12700 mg/L
Carbon black	1333-86-4	24 Hr EC50 Daphnia magna: >5600 mg/L

Environmental effects

Harmful to aquatic life.

Aquatic toxicity	Not available
Persistence / degradability	Not available
Bioaccumulation / accumulation	Not available
Partition coefficient	Not available
Mobility in environmental media	Not available
Chemical fate information	Not available
Other adverse effects	Not available

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Review federal, provincial, and local government requirements prior to disposal. Do not puncture or incinerate container.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name Consumer Commodity, ORM-D (Applicable to containers up to 1L)

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name Limited Quantity (Applicable to containers up to 1L)

15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - CEPA - High Priority Chemicals as Identified by DSL Categorization

Butane	106-97-8	Batch 4, published November 17, 2007
Carbon black	1333-86-4	Batch 12, published September 26, 2009

Canada - WHMIS - Ingredient Disclosure List

1,2,4-Trimethylbenzene	95-63-6	0.1 %
Acetone	67-64-1	1 %
Butane	106-97-8	1 %
Carbon black	1333-86-4	1 %

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Acetone	67-64-1	5000 Lb final RQ; 2270 kg final RQ
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U.S. - CERCLA/SARA - Section 313 - Emission Reporting

1,2,4-Trimethylbenzene	95-63-6	1.0 % de minimis concentration
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Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

2-Propanone: 5000.0000
Benzene, 1,3-dimethyl-: 1000.0000
Benzene, (1-methylethyl)-: 5000.0000
Benzene, ethyl-: 1000.0000
Benzene, 1,2-dimethyl-: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

WHMIS status Controlled

WHMIS classification Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2A, 2B

WHMIS labeling



U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

1,2,4-Trimethylbenzene	95-63-6	[present]
Acetone	67-64-1	Present
Butane	106-97-8	Present
Carbon black	1333-86-4	Present (exempt when in form where exposure to dust cannot occur)
Hydrous magnesium silicate	14807-96-6	Present (exempt except when inhalable dust is present or can be generated)

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Carbon black	1333-86-4	IARC Group 2B Carcinogen (extracts)
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U.S. - Illinois - Toxic Air Contaminants

1,2,4-Trimethylbenzene	95-63-6	Present
Carbon black	1333-86-4	Present

U.S. - Louisiana - Reportable Quantity List for Pollutants

Acetone	67-64-1	5000 Lb final RQ; 2270 kg final RQ
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U.S. - Massachusetts - Right To Know List

1,2,4-Trimethylbenzene	95-63-6	Present
Acetone	67-64-1	Present
Butane	106-97-8	Present
Carbon black	1333-86-4	Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
Hydrous magnesium silicate	14807-96-6	Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
Propane	74-98-6	Present

U.S. - Minnesota - Hazardous Substance List

1,2,4-Trimethylbenzene	95-63-6	Present
Acetone	67-64-1	Present
Butane	106-97-8	Present
Carbon black	1333-86-4	Carcinogen
Hydrous magnesium silicate	14807-96-6	Present (fibrous, nonasbestiform, and respirable)
Propane	74-98-6	Simple asphyxiant

U.S. - New Jersey - Right to Know Hazardous Substance List

1,2,4-Trimethylbenzene	95-63-6	sn 2716
Acetone	67-64-1	sn 0006
Butane	106-97-8	sn 0273
Carbon black	1333-86-4	sn 0342
Hydrous magnesium silicate	14807-96-6	sn 1773
Propane	74-98-6	sn 1594

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

Acetone	67-64-1	5000 Lb RQ (air); 1 lb RQ (land/water)
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U.S. - Pennsylvania - RTK (Right to Know) List

1,2,4-Trimethylbenzene	95-63-6	Environmental hazard
Acetone	67-64-1	Environmental hazard
Butane	106-97-8	Present
Carbon black	1333-86-4	Present
Hydrous magnesium silicate	14807-96-6	Present
Propane	74-98-6	Present

U.S. - Rhode Island - Hazardous Substance List

1,2,4-Trimethylbenzene	95-63-6	Toxic
Acetone	67-64-1	Toxic; Flammable
Butane	106-97-8	Toxic; Flammable
Carbon black	1333-86-4	Toxic
Hydrous magnesium silicate	14807-96-6	Toxic (powder or fibrous)
Propane	74-98-6	Toxic; Flammable

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Disclaimer	Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.
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Prepared by	Dell Tech Laboratories Ltd. (519) 858-5021
Other information	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.