

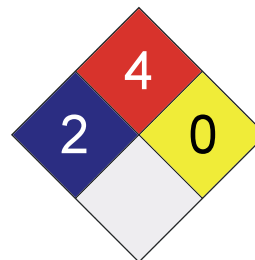
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Marsh Orange Spray Stencil Ink  
**CAS #** Mixture  
**Product use** Spray Ink  
**Manufacturer** Marsh Shipping Supply Company, 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	0
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.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**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. Skin. Respiratory system.

**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
Acetone	67-64-1	30 - 60
Heptane (n-)	142-82-5	3 - 7
Butane	106-97-8	10 - 30
Propane	74-98-6	10 - 30
2-Propanol, 1-methoxy-, acetate	108-65-6	1 - 5
1,2,4-Trimethylbenzene	95-63-6	0.5 - 1.5
Solvent naphtha (petroleum), light aromatic	64742-95-6	0.5 - 1.5

## 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.

<b>Ingestion</b>	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.
<b>Notes to physician</b>	Symptoms may be delayed.
<b>General advice</b>	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.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Flammable by WHMIS/OSHA criteria. Containers may explode when heated.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Carbon dioxide. Alcohol foam. Dry chemical. Foam. Water Fog.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	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.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.

## 6. Accidental Release Measures

<b>Personal precautions</b>	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.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	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.

## 7. Handling and Storage

<b>Handling</b>	Use good industrial hygiene practices in handling this material.
<b>Storage</b>	Keep out of reach of children. Do not store at temperatures above 49 °C. 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	<b>ACGIH-TLV</b> TWA: 25 ppm <b>OSHA-PEL</b> TWA: 25 ppm
2-Propanol, 1-methoxy-, acetate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Acetone	<b>ACGIH-TLV</b> TWA: 500 ppm STEL: 750 ppm <b>OSHA-PEL</b> Not established
Butane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> Not established
Heptane (n-)	<b>ACGIH-TLV</b> TWA: 1635 mg/m <sup>3</sup> STEL: 500 ppm <b>OSHA-PEL</b> TWA: 500 ppm
Propane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> TWA: 1000 ppm
Solvent naphtha (petroleum), light aromatic	<b>ACGIH-TLV</b> TWA: 50 ppm <b>OSHA-PEL</b> Not established

<b>Engineering controls</b>	Use only under good ventilation conditions or with respiratory protection.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Safety goggles or glasses.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	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.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands and face before breaks and immediately after handling the product.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Aerosol.
<b>Color</b>	Orange
<b>Form</b>	Spray
<b>Odor</b>	Solvent.
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	Not available

<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Flash point</b>	-104.4 °C (-156 °F)
<b>Evaporation rate</b>	< 1 (Ether = 1)
<b>Flammability limits in air, lower, % by volume</b>	1.8
<b>Flammability limits in air, upper, % by volume</b>	12.8
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Percent volatile</b>	Not available

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Aerosol containers are unstable at temperatures above 49°C. Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong acids, alkalies and oxidizing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Phosgene.
<b>Possibility of hazardous reactions</b>	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	> 16000 mg/m3 rat
Butane	658 mg/m3 rat
Heptane (n-)	25000 ppm rat
Propane	Not available
Solvent naphtha (petroleum), light aromatic	> 10.2 Mg/L 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
Butane	Not available
Heptane (n-)	> 15000 mg/kg rat
Propane	Not available
Solvent naphtha (petroleum), light aromatic	4700 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	May cause irritation. Contact with liquid may cause frostbite.
<b>Skin</b>	May cause irritation. Contact with liquid may cause frostbite.
<b>Inhalation</b>	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Prolonged exposure may cause chronic effects.
<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects  
Teratogenicity

Non-hazardous by WHMIS/OSHA criteria.  
Non-hazardous by WHMIS/OSHA criteria.

## 12. Ecological Information

Ecotoxicity	Not available
Environmental effects	Not available
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

## 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

### Department of Transportation (DOT)

Basic shipping requirements:

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

IATA: Shipping Name: Aerosols, flammable, Class 2.1, UN1950  
IMDG Shipping Name: Aerosols, Class 2, UN1950, EMS No. F-D, S-U

### Transportation of Dangerous Goods (TDG)

Basic shipping requirements:

Proper shipping name Consumer Commodity (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.

**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.

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

### CERCLA (Superfund) reportable quantity

2-Propanone: 5000.0000

### 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

Safe Drinking Water Act (SDWA) Not available

Drug Enforcement Agency (DEA) Not available

Food and Drug Administration (FDA) Not available

WHMIS status Controlled

WHMIS labeling



State regulations

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**Massachusetts - Right To Know List**

1,2,4-Trimethylbenzene	95-63-6	Present
Acetone	67-64-1	Present
Butane	106-97-8	Present
Heptane (n-)	142-82-5	Present
Propane	74-98-6	Present

**Minnesota - Hazardous Substance List**

1,2,4-Trimethylbenzene	95-63-6	Present
Acetone	67-64-1	Present
Butane	106-97-8	Present
Heptane (n-)	142-82-5	Present
Propane	74-98-6	Simple asphyxiant

**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
Heptane (n-)	142-82-5	sn 1339
Propane	74-98-6	sn 1594

**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
Heptane (n-)	142-82-5	Present
Propane	74-98-6	Present

Inventory name

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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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