

# Bradley Products, Inc.

Manufacturers of  
**The Davidson Marking System<sup>®</sup>**

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Dear Customer:

P.O. Box 201405  
Bloomington, MN  
55420

Phone:  
800-325-7785

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952-881-1873

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Internet:  
www.bradleyproducts.com

This MSDS (Material Safety Data Sheet) contains the latest information relating to our product. Please discontinue using any former Bradley Products, Inc. MSDS for this product. The format of this MSDS has changed substantially from previous versions and has been modified to follow the ANSI recommended 16 section format. It continues to be prepared in accordance with the OSHA Hazard Communication Standard (29CFR 1910.1200).

Please:


- Review this MSDS and ensure you understand and comply with its content.
- Inform all employees and other users of the information contained in this MSDS before handling the product.
- Bradley Products updates MSDSs when substantial new information is obtained. Newly modified MSDSs should be forwarded to all downstream users.

This MSDS contains information which may be helpful for you to comply with certain regulations and laws. It is not all inclusive information and could not be. Only you are in a position to determine what legal and other requirements are associated with the use of this product in your particular process and operation. It is your obligation to understand and comply with all information contained in this MSDS as well as all applicable laws, rules and regulations relating to your handling, use, storage and processing of this material.

If you want additional copies of this MSDS, we are happy to provide them to you, at no charge, via mail, fax, e-mail, or you can download a PDF copy from our web site. If you have questions or desire additional information in the handling, storage, use, or disposal of this product, please contact us.

Sincerely,  
Bradley Products, Inc.

***Important Note: The Davidson Marking System<sup>®</sup> dyes, manufactured by Bradley Products, Inc. are not intended for use on a living patient. These dyes are only intended for use on excised tissues.***



*The original  
tissue marking system  
for a variety of  
applications  
requiring the  
orientation of  
tissue specimens in  
medical laboratories.*



**Bradley Products, Inc.**  
**MATERIAL SAFETY DATA SHEET**  
**Product: Davidson Marking System® Yellow Dye all sizes**



Effective Date: November 1, 2007

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Bradley Products, Inc. encourages safe handling of this product. To promote safe handling, each recipient should: 1) Notify its employees, agents, contractors and others whom it knows or believes will use this material or the information in this MSDS and any other information regarding hazards or safety; 2) Furnish this same information to each of its customers for the product; and 3) Request its customers to notify their employees, customers and other users of the product of this information.

**Section I – Product and Company Information**

**1.1 PRODUCT IDENTIFICATION**

Product: Davidson Marking System® Yellow Dye all sizes  
 HMIS Ratings: Health - 0 Flammability - 1 Reactivity - 0

**1.2 COMPANY IDENTIFICATION**

Bradley Products, Inc.  
 P.O. Box 201405  
 Bloomington, MN 55420

Phone: 952-881-1430  
 Toll-free: 800-325-7785  
 Fax: 952-881-1873

e-mail: dms@bradleyproducts.com  
 web site: www.bradleyproducts.com

**Section II – Composition – Right to Know**

<b>Product CAS #</b>	<b>Product</b>	<b>CAS #</b>	
Water	7732-18-5	polymer	proprietary
Pigment Yellow surfactant	proprietary	**Tributyl phosphate (<1%)	126-73-8
	proprietary	**OSHA Hazardous Ingredients	

**Section III – Hazardous Identification and Health Effects**

**3.1 EMERGENCY OVERVIEW**

**Appearance:** Yellow  
**Physical State:** Liquid  
**Odor:** Odorless  
**Carcinogenicity:** This product does not contain ingredients listed as carcinogens by NTP, IARC, or OSHA.  
**Hazards:** Irritating to skin and eyes.  
 Inhalation may cause difficulty in breathing and irritation to respiratory tract.

**3.2 POTENTIAL HEALTH EFFECTS**

**Effects of Single Acute Overexposure**

**Inhalation:** Inhalation may cause difficulty in breathing and irritation of respiratory tract.  
**Eye Contact:** Contact with eyes may result in an irritation.  
**Skin Contact:** Contact with skin may result in an irritation.  
**Ingestion:** No information currently available.

**3.3 POTENTIAL ENVIRONMENTAL EFFECT**

See Section XV - Regulatory Information

**Section IV – First Aid Procedures**

**4.1 INHALATION**

Move to fresh air. Aid in breathing, if necessary, and get medical attention if irritation develops or if breathing becomes difficult.

**4.2 EYE CONTACT**

Immediately wash eyes with running water for 15 min. If irritation develops, consult a physician.

**4.3 SKIN CONTACT**

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, consult a physician.

**4.4 INGESTION**

If swallowed, dilute with water and induce vomiting. Never give fluids if victim is unconscious or having convulsions. Get medical attention if irritation develops.

**4.5 NOTES TO PHYSICIAN**

No information currently available.

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**Section V – Fire and Explosion Data**

**5.1 FLAMMABLE PROPERTIES**

**Flash Point (Test Method):** N/A  
**Autoignition Temp:** N/A  
**Flammability Limits in Air (% by Vol):** Lower: N/A Upper: N/A

**5.2 EXTINGUISHING MEDIUM**

Use water mist, foam, carbon dioxide or dry chemical extinguishing media.

**5.3 EXTINGUISHING MEDIUM TO AVOID**

No information currently available.

**5.4 SPECIAL FIREFIGHTING PROCEDURES**

No information currently available.

**5.5 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Firefighters should be equipped with self-contained breathing apparatus.

**5.6 UNUSUAL FIRE AND EXPLOSION HAZARDS**

No information currently available.

**5.7 HAZARDOUS DECOMPOSITION PRODUCTS**

Burning may produce oxides of carbon and nitrogen, chlorine compounds as well as other toxic gases and vapors.

**Section VI – Accidental Spill / Leak Procedures**

**ACCIDENTAL RELEASE MEASURES**

Absorb onto sand or other absorbent material. Shovel into closable container for disposal.

**Section VII – Handling and Storage**

**7.1 HANDLING**

**Single Word: “NOTICE!”**

**General Handling**

In accordance with good industrial practice, handle with care and avoid personal contact. Use only with adequate ventilation. Avoid breathing mist or vapors. Wash hands and face thoroughly after handling and before eating, drinking, or using tobacco products. For industrial use only.

**Ventilation**

General room ventilation is expected to be satisfactory.

**7.2 STORAGE**

Store in closed containers. Store containers in diked areas. Keep from freezing.

**Section VIII – Exposure Controls and Personal Protection**

**8.1 EXPOSURE LIMITS**

No information currently available.

**8.2 PERSONAL PROTECTION**

**Respiratory Protection:** NIOSH approved chemical respirator or dust mask, if needed.

**Eye Protection:** Wear safety glasses or goggles to protect against dust particles.

**Protective Clothing:** Protective gloves to prevent skin contact>

(The preservative in this product is a skin sensitizer. Though it is present at a concentration less than 1%, individuals already sensitized to this benzisothiazolinone containing preservative should exercise care in handling.)

**Ventilation:** Use local exhaust.

**Other:** N/A

**8.3 ENGINEERING CONTROLS**

A properly grounded dust collection system is recommended.

**Section IX – Physical and Chemical Properties**

Physical State:	Liquid	Freezing Point:	0°C (32°F)
Appearance:	Yellow	Specific Gravity (g/ml):	>1 (H2O = 1 g/cm3)
pH:	8.5-9.5	Vapor Pressure:	ND
Solubility in Water:	Miscible	Vapor Density:	ND
Odor:	Odorless	Evaporation Rate:	ND
Percent Volatile:	0 to nil	Melting Point	ND
Boiling Point:	100°C (212°F)	Decomposition Temp:	>200°C (>392°F)

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**Section X – Stability and Reactivity**

**10.1 STABILITY / INSTABILITY**

This product is stable.

**Conditions to Avoid:** None known.

**Chemical Incompatibility:** No unusual hazards.

**10.2 HAZARDOUS POLYMERIZATION**

Will not occur.

**Hazardous Decomposition Products:**

Burning may product oxides of carbon and nitrogen, chlorine compounds as well as other toxic gases and vapors.

This product is not recommended for use in polymers processed at temperatures about 200°C (392°F). Experiments with similar products have indicated that diarylide pigments can decompose at height temperatures producing several aromatic amine type decomposition products, among them 3,3'-dichlorobenzidine which is a suspect carcinogen.

**Conditions to Avoid:** No information currently available.

**10.3 INHIBITORS / STABALIZERS**

no information currently available.

**Section XI – Toxicological Information**

**Additional Information:**

**For Pigment Yellow:**

Acute oral LD50 (Rats): Greater than 5,000 mg/kg

Skin irritation (Rabbits): non-irritating

Eye irritation (Rabbits): non-irritating

Carcinogenicity: Not listed as a carcinogen by TP, IARC, or OSHA. Inhalation LC50 (Rats): 4-hour aerosol exposure; 14-days aerosol inhalation study (Rats): No observable effects level (NOEL): Less than 52 mg/m3 air

Overexposure effects: Not available.

Signs and symptoms of exposure: Not available.

Medical conditions aggravated by exposure: Not available.

**Section XII – Ecological Information**

**Ecotoxicity:**

**For Pigment Yellow:**

Biological degradation: Barely soluble in water (not tested).

**Section XIII – Disposal Considerations**

**13.1 WASTE DISPOSAL METHOD**

Dispose in accordance with Federal, State, and Local regulations.

Dispose empty containers by crushing or whatever means will prevent unauthorized reuse.

**Section XIV – Transport Information**

**14.1 U.S. DOT**

Not regulated as a hazardous material by the U.S. Dept. of Transportation (DOT) 49 CFR 172.

**Additional Information:**

Not regulated by IATA or IMDG.

**Section XV – Regulatory Information**

**OSHA Status:** This MSDS (Material Safety Data Sheet) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered a hazardous chemical under that standard.

**TSCA Inventory Status:** All chemical components in this product are listed on the U.S. EPA Toxic Substances Control Act Chemical Substances Inventory.

**Additional Federal Information:** Chemical Weapons Convention: This product does not contain any Schedule 1, 2, or 3 chemicals under the Chemical Weapons Convention.

**SARA Title III: Section 302 - Extremely Hazardous Substance(s):** This product contains the following chemicals regulated under Section 302 as extremely hazardous substance(s): None known.

**SARA Title III: Section 313 - Toxic Chemical(s):** This product does not contain a toxic chemical for routine annual toxic chemical release reporting under Title III of the Emergency Planning and Community Right-To-Know Act (SARA 313).

**RCRA:** Not a hazardous waste under RCRA (40 CFR 261)

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**Clean Air Act (CAA):** None known.

**Canadian Inventory Status (CEPA):** All chemical components are listed on the Canadian Domestic Substance List (DSL).

**Europe EINECS:** All chemical components are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS).

**California Proposition 65:** No ingredient in this product is regulated by the California Safe Drinking Water and Toxic Enforcement Act of 1986.

**New Jersey Right-to-Know:** The following is required composition information:

Water (CAS #7732-18-5). Not on New Jersey Right To Know Hazardous Substance List.

Pigment Yellow: Not on New Jersey Right To Know Hazardous Substance List.

NJTS #29943300001-4019 (Surfactant). Not on new Jersey Right To Know Hazardous Substance List.

NJTS #29943300001-5537 (Polymer). Not on the New Jersey Right To Know Hazardous Substance List.

Tributyl phosphate (CAS #126-73-8). On New Jersey Right To Know Hazardous Substance List.

**Pennsylvania Right-to-Know:** The following is required composition information:

Water (CAS #7732-18-5). Not on Pennsylvania Right To Know Hazardous Substance List.

Pigment Yellow: Not on Pennsylvania Right To Know Hazardous Substance List.

NJTS #29943300001-4019 (Surfactant). Not on Pennsylvania Right To Know Hazardous Substance List.

NJTS #29943300001-5537 (Polymer). Not on the Pennsylvania Right To Know Hazardous Substance List.

Tributyl phosphate (CAS #126-73-8). On Pennsylvania Right To Know Hazardous Substance List.

**VOC's:** Nil to 6%

## **Section XVI – Other Information**

### **16.1 AVAILABLE LITERATURE AND BROCHURES**

Additional product safety information on this product may be available and may be obtained by calling Bradley Products, Inc. or visit the web site at [www.bradleyproducts.com](http://www.bradleyproducts.com)

### **16.2 SPECIFIC HAZARD RATING SYSTEM**

No information currently available.

### **16.3 RECOMMENDED USES AND RESTRICTIONS**

For industry use only. This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin or implantation within the human body is specifically intended. Bradley Products, Inc. is not able to recommend this material as safe and effective for such uses and assumes no liability for such use.

### **16.4 REVISION**

Version: 2

Revision: November 1, 2007

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While Bradley Products, Inc. (BPI) believes the data set forth herein are accurate as of the date hereof, BPI makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon, such data are offered solely for your consideration, investigation and verification. Since the use of this information and the conditions of the use of the product are not under the control of BPI, it is the user's obligation to determine conditions of safe use of the product.