

**MATERIAL SAFETY DATA SHEET**

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**MANUFACTURER**

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**PRODUCT IDENTIFICATION**

**PRODUCT:** Sensitive DAB Substrate Kit  
**CATALOG #:** 10-0048

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**HAZARDOUS COMPONENT INFORMATION**

SINCE THE FOLLOWING COMPONENT IS AT A PROPRIETARY CONCENTRATION, ALL HAZARDOUS DATA WILL BE GIVEN AS IF FOR THE PURE COMPONENT

**REAGENT A**  
DAB CHROMOGEN SOLUTION (2X)

**HAZARDOUS COMPONENT**  
3,3'-DIAMINOBENZIDINE TETRACHLORIDE

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THE FOLLOWING INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT CLAIM TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. TRAINED PERSONNEL AND GOOD LABORATORY PRACTICES SHOULD COMPLEMENT USE OF THIS PRODUCT. GENEMED BIOTECHNOLOGIES, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGES RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

## HAZARDOUS COMPONENT INFORMATION

### **COMPONENT**

3,3'-DIAMINOBENZIDINE TETRACHLORIDE

### **CAS #**

N/A

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### TOXICITY HAZARDS

RTECS NO: DV8753000

3,3',4,4'-BIPHENYLTETRAMINE, TETRAHYDROCHLORIDE

### **TOXICITY DATA**

IPR-MUS LD50:330 MG/KG

NCIBR\* NCI-E-68-1311,73

### **REVIEWS, STANDARDS, AND REGULATIONS**

EPA TSCA CHEMICAL INVENTORY, 1986

MEETS CRITERIA FOR PROPOSED OSHA MEDICAL RECORDS RULE FEREAC 47,30420,82  
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS  
PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

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### HEALTH HAZARD DATA

#### **ACUTE EFFECTS**

HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES EYE AND SKIN IRRITATION. MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

#### **CHRONIC EFFECTS**

POSSIBLE CARCINOGEN.

TO THE BEST OF OUR KNOWLEDGE THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

#### **FIRST AID**

IN CASE OF EYE CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. IN CASE OF SKIN CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS AMOUNTS OF WATER. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE.

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### PHYSICAL DATA

DATA NOT AVAILABLE

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### FIRE AND EXPLOSION HAZARD DATA

#### **EXTINGUISHING MEDIA**

WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM.

#### **SPECIAL FIREFIGHTING PROCEDURES**

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

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### REACTIVITY DATA

#### **INCOMPATIBILITIES**

STRONG OXIDIZING AGENTS

#### **HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS**

TOXIC FUMES OF: CARBON MONOXIDE AND CARBON DIOXIDE, NITROGEN OXIDES, HYDROGEN CHLORIDE GAS

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### **SPILL OR LEAK PROCEDURES**

#### **STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.

AVOID RAISING DUST.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

#### **WASTE DISPOSAL METHOD**

DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.

OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.

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### **PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

CHEMICAL SAFETY GOGGLES

RUBBER GLOVES

NIOSH/MSHA-APPROVED RESPIRATOR

SAFETY SHOWER AND EYE BATH

USE ONLY IN A CHEMICAL FUME HOOD

DO NOT BREATHE DUST

DO NOT GET IN EYES, ON SKIN OR ON CLOTHING

WASH THOROUGHLY AFTER HANDLING

IRRITANT

POSSIBLE CARCINOGEN

KEEP TIGHTLY CLOSED

STORE IN A COOL DRY PLACE