

Material Safety Data Sheets

Full-size (8.5 x 11") pdf copy of MSDS is available at www.edvotek.com or by request.

EDVOTEK®		Material Safety Data Sheet	
May be used to comply with OSHA's Hazard Communication Standard. 29 CFR 1910.1200. Standard must be consulted for specific requirements.		May be used to comply with OSHA's Hazard Communication Standard. 29 CFR 1910.1200. Standard must be consulted for specific requirements.	
IDENTITY (As Used on Label and List)		Agrose	
Section I		Section II - Hazardous Ingredients/Identify Information	
Manufacturer's Name		Hazardous Components Specific Chemical Identity, Common Name(s)	
EDVOTEK, Inc.		OSHA PEL	
Address (Number, Street, City, State, Zip Code)		ACGIH TLV	
14676 Rothgeb Drive		Recommended % (Optional)	
Rockville, MD 20850		This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.	
Emergency Telephone Number (301) 251-5990		Section III - Physical/Chemical Characteristics	
Telephone Number for information (301) 251-5990		Boiling Point	
Date Prepared 10/05/06		For 1% solution (94 F)	
Signature of Preparer (optional)		Specific Gravity (H ₂ O = 1)	
		No data	
		Vapor Pressure (mm Hg)	
		No data	
		Melting Point	
		No data	
		Evaporation Rate (Burl Acetate = 1)	
		No data	
		Solubility in Water	
		Insoluble - cold	
		Appearance and Odor	
		White powder, no odor	
		Section IV - Physical/Chemical Characteristics	
		Flash Point (Method Used)	
		No data	
		Flammable Limits	
		LEL	
		N.D.	
		Extinguishing Media	
		Water spray, dry chemical, carbon dioxide, halon or standard foam	
		Special Fire Fighting Procedures	
		Possible fire hazard when exposed to heat or flame	
		Unusual Fire and Explosion Hazards	
		None	

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IDENTITY (As Used on Label and List)		50x Electrophoresis Buffer	
Section I		Section II - Hazardous Ingredients/Identify Information	
Manufacturer's Name		Hazardous Components Specific Chemical Identity, Common Name(s)	
EDVOTEK, Inc.		OSHA PEL	
Address (Number, Street, City, State, Zip Code)		ACGIH TLV	
14676 Rothgeb Drive		Recommended % (Optional)	
Rockville, MD 20850		This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.	
Emergency Telephone Number (301) 251-5990		Section III - Physical/Chemical Characteristics	
Telephone Number for information (301) 251-5990		Boiling Point	
Date Prepared 10/05/06		No data	
Signature of Preparer (optional)		Specific Gravity (H ₂ O = 1)	
		No data	
		Vapor Pressure (mm Hg)	
		No data	
		Melting Point	
		No data	
		Evaporation Rate (Burl Acetate = 1)	
		No data	
		Solubility in Water	
		Appreciable, (greater than 10%)	
		Appearance and Odor	
		Clear, liquid, slight vinegar odor	
		Section IV - Physical/Chemical Characteristics	
		Flash Point (Method Used)	
		No data	
		Flammable Limits	
		LEL	
		N.D.	
		Extinguishing Media	
		Use extinguishing media appropriate for surrounding fire.	
		Special Fire Fighting Procedures	
		Wear protective equipment and SCBA with full facepiece operated in positive pressure mode.	
		Unusual Fire and Explosion Hazards	
		None identified	

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IDENTITY (As Used on Label and List)		Practice Gel Loading Solution	
Section I		Section II - Hazardous Ingredients/Identify Information	
Manufacturer's Name		Hazardous Components Specific Chemical Identity, Common Name(s)	
EDVOTEK, Inc.		OSHA PEL	
Address (Number, Street, City, State, Zip Code)		ACGIH TLV	
14676 Rothgeb Drive		Recommended % (Optional)	
Rockville, MD 20850		This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.	
Emergency Telephone Number (301) 251-5990		Section III - Physical/Chemical Characteristics	
Telephone Number for information (301) 251-5990		Boiling Point	
Date Prepared 10/05/06		No data	
Signature of Preparer (optional)		Specific Gravity (H ₂ O = 1)	
		No data	
		Vapor Pressure (mm Hg)	
		No data	
		Melting Point	
		No data	
		Evaporation Rate (Burl Acetate = 1)	
		No data	
		Solubility in Water	
		Soluble	
		Appearance and Odor	
		Blue liquid, no odor	
		Section IV - Physical/Chemical Characteristics	
		Flash Point (Method Used)	
		No data	
		Flammable Limits	
		LEL	
		No data	
		Extinguishing Media	
		Dry chemical, carbon dioxide, water spray or foam	
		Special Fire Fighting Procedures	
		Use agents suitable for type of surrounding fire. Keep upwind, avoid breathing hazardous sulfur oxides and bromides. Wear SCBA.	
		Unusual Fire and Explosion Hazards	
		Unknown	

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112
Experiment

EDVOTEK®		Material Safety Data Sheet	
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.		May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.	
IDENTITY (As Used on Label and List) InstaStain® Etidium Bromide		IDENTITY (As Used on Label and List) InstaStain® Etidium Bromide	
Section I - Manufacturer's Name EDVOTEK, Inc. P.O. Box 1232 West Bethesda, MD 20827		Section I - Manufacturer's Name InstaStain, Inc. P.O. Box 1232 West Bethesda, MD 20827	
Emergency Telephone Number (301) 251-5990		Emergency Telephone Number (301) 251-5990	
Telephone Number for Information (301) 251-5990		Telephone Number for Information (301) 251-5990	
Date Prepared 03-26-09		Date Prepared 10/05/06	
Signature of Preparer (optional)		Signature of Preparer (optional)	
Section II - Hazardous Ingredients/Identify Information Hazardous Components (Specific Chemical Identity, Common Name(s)) OSHA PEL ACGIH TLV Other Limits Methylene Blue Chloride 3.78 (Dimethylamino) Phenothiazin 5 UM Chloride No data available % (Optional) CAS # 817-33-4		Section II - Hazardous Ingredients/Identify Information Hazardous Components (Specific Chemical Identity, Common Name(s)) OSHA PEL ACGIH TLV Other Limits Etidium Bromide Data not available % (Optional) CAS # 139-33-3	
Section III - Physical/Chemical Characteristics Boiling Point No data Specific Gravity (4.0 = 1) No data Vapor Pressure (mm Hg.) No data Melting Point No data Vapor Density (AIR = 1) No data Evaporation Rate (Butyl Acetate = 1) No data Solubility in Water Soluble - cold		Section III - Physical/Chemical Characteristics Boiling Point No data Specific Gravity (4.0 = 1) No data Vapor Pressure (mm Hg.) No data Melting Point No data Vapor Density (AIR = 1) No data Evaporation Rate (Butyl Acetate = 1) No data Solubility in Water Soluble	
Appearance and Odor Chemical bound to paper, no odor		Appearance and Odor Chemical bound to paper, no odor	
Section IV - Physical/Chemical Characteristics Flash Point (Method Used) No data Flammable Limits LEL UEL Extinguishing Media Water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam Special Fire Fighting Procedures Wear protective clothing to prevent contact with skin and eyes Unusual Fire and Explosion Hazards Emits toxic fumes under fire conditions		Section IV - Physical/Chemical Characteristics Flash Point (Method Used) No data Flammable Limits LEL UEL Extinguishing Media Water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam Special Fire Fighting Procedures Wear protective clothing and SCBA to prevent contact with skin & eyes Unusual Fire and Explosion Hazards Emits toxic fumes	
Section V - Reactivity Data Stability Unstable Stable X None Incompatibility Strong oxidizing agents Hazardous Decomposition or Byproducts Toxic fumes of Carbon monoxide, Carbon dioxide, nitrogen oxides, sulfur oxides, hydrogen, chloride gas Hazardous Polymerization May Occur Conditions to Avoid None Section VI - Health Hazard Data Route(s) of Entry Inhalation? Yes Skin? Yes Ingestion? Yes Health Hazards (Acute and Chronic) Eyes: May cause eye irritation Inhalation: Cyanosis Skin: May cause skin irritation NTP? IARC Monographs? OSHA Regulation? Meets criteria for proposed OSHA medical records rule PEREC 47.30420.82 Signs and Symptoms of Exposure No data available Medical Conditions Generally Aggravated by Exposure No data available Emergency First Aid Procedures Treat symptomatically		Section V - Reactivity Data Stability Unstable Stable X None Incompatibility Strong oxidizing agents Hazardous Decomposition or Byproducts Carbon dioxide, nitrogen oxide, hydrogen bromide gas Hazardous Polymerization May Occur Conditions to Avoid None Section VI - Health Hazard Data Route(s) of Entry Inhalation? Yes Skin? Yes Ingestion? Yes Health Hazards (Acute and Chronic) May alter genetic material Acute: Material Irritating to mucous membranes, upper respiratory tract, eyes, skin Carcinogenicity: No data available NTP? IARC Monographs? OSHA Regulation? Signs and Symptoms of Exposure Irritation to mucous membranes and upper respiratory tract Medical Conditions Generally Aggravated by Exposure No data Emergency First Aid Procedures Treat symptomatically and supportively	
Section VII - Precautions for Safe Handling and Use Steps to be taken in case Material is Released for Spilled Ventilate area and wash spill site Waste Disposal Method Mix material with a combustible solvent and burn in chemical incinerator equipped with afterburner and scrubber. Check local and state regulations. Precautions to be Taken in Handling and Storing Keep tightly closed. Store in cool, dry place Other Precautions None		Section VII - Precautions for Safe Handling and Use Steps to be taken in case Material is Released for Spilled Wear SCBA, rubber boots, rubber gloves Waste Disposal Method Mix material with combustible solvent and burn in a chemical incinerator equipped afterburner and scrubber Precautions to be taken in Handling and Storing Use in chemical fume hood with proper protective lab gear. Other Precautions Mutagen	
Section VIII - Control Measures Respiratory Protection (Specify Type) MIOHOSHIA approved, SCBA Ventilation Local Exhaust Required Other Mechanical (General) Required Other Protective Gloves Rubber Eye Protection Chem. safety goggles Other Protective Clothing or Equipment Rubber boots Work/Hygiene Practices Use in chemical fume hood with proper protective lab gear.		Section VIII - Control Measures Respiratory Protection (Specify Type) SCBA Ventilation Local Exhaust Yes Special Chem. fume hood Mechanical (General) No Other None Protective Gloves Rubber Eye Protection Chem. safety goggles Other Protective Clothing or Equipment Rubber boots Work/Hygiene Practices Use in chemical fume hood with proper protective lab gear.	

Restriction Enzyme Cleavage of DNA & Electrophoresis

EDVOTEK Series 100 Electrophoresis Experiments:

Cat. #	Title
101	Principles and Practice of Agarose Gel Electrophoresis
102	Restriction Enzyme Cleavage Patterns of DNA
103	PCR - Polymerase Chain Reaction
104	Size Determination of DNA Restriction Fragments
105	Mapping of Restriction Sites on Plasmid DNA
112	DNA Fingerprinting - Identification of DNA by Restriction Fragmentation Patterns
112	Analysis of <i>Eco</i> RI Cleavage Patterns of Lambda DNA
114	DNA Paternity Testing Simulation
115	Cancer Gene Detection
116	Sickle Cell Gene Detection (DNA-based)
117	Detection of Mad Cow Disease
118	Cholesterol Diagnostiics
124	DNA-based Screening for Smallpox
130	DNA Fingerprinting - Amplification of DNA for Fingerprinting



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