

 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.			
IDENTITY (As Used on Label and List) Agarose			
Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.			
Section I Manufacturer's Name EDVOTEK, Inc. Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850			
Emergency Telephone Number (301) 251-5990 Telephone Number for information (301) 251-5990 Date Prepared 07/01/03 Signature of Preparer (optional)			
Section II - Hazardous Ingredients/Identify Information Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard. CAS #9012-36-6			
Section III - Physical/Chemical Characteristics			
Boiling Point For 1% solution	94 F	Specific Gravity (H ₂ O = 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	Insoluble - cold		
Appearance and Odor	White powder, no odor		
Section IV - Physical/Chemical Characteristics N.D. = No data			
Flash Point (Method Used)	No data	Flammable Limits	LEL N.D. UEL 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		

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	None
Incompatibility	No data available		
Hazardous Decomposition or Byproducts			
Hazardous Polymerization			
	May Occur		Conditions to Avoid
	Will Not Occur	X	None
Section VI - Health Hazard Data			
Route(s) of Entry: Inhalation? Yes Skin? Yes Ingestion? Yes			
Health Hazards (Acute and Chronic) Inhalation: No data available Ingestion: Large amounts may cause diarrhea			
Carcinogenicity: NTP? IARC Monographs? OSHA Regulation?			
Signs and Symptoms of Exposure No data available			
Medical Conditions Generally Aggravated by Exposure No data available			
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 Sweep up and place in suitable container for disposal			
Waste Disposal Method Normal solid waste disposal			
Precautions to be Taken in Handling and Storing None			
Other Precautions None			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) Chemical cartridge respirator with full facepiece.			
Ventilation	Local Exhaust		Special
	Mechanical (General)	Gen. dilution ventilating	Other
Protective Gloves	Yes		Eye Protection
			Splash proof goggles
Other Protective Clothing or Equipment Impervious clothing to prevent skin contact			
Work/Hygienic Practices None			

 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.			
IDENTITY (As Used on Label and List) 50x Electrophoresis Buffer			
Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.			
Section I Manufacturer's Name EDVOTEK, Inc. Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850			
Emergency Telephone Number (301) 251-5990 Telephone Number for information (301) 251-5990 Date Prepared 07/01/03 Signature of Preparer (optional)			
Section II - Hazardous Ingredients/Identify Information Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.			
Section III - Physical/Chemical Characteristics			
Boiling Point	No data	Specific Gravity (H ₂ O = 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	Appreciable, (greater than 10%)		
Appearance and Odor	Clear, liquid, slight vinegar odor		
Section IV - Physical/Chemical Characteristics N.D. = No data			
Flash Point (Method Used)	No data	Flammable Limits	LEL N.D. UEL 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		

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	None
Incompatibility	Strong oxidizing agents		
Hazardous Decomposition or Byproducts Carbon monoxide, Carbon dioxide			
Hazardous Polymerization			
	May Occur		Conditions to Avoid
	Will Not Occur	X	None
Section VI - Health Hazard Data			
Route(s) of Entry: Inhalation? Yes Skin? Yes Ingestion? Yes			
Health Hazards (Acute and Chronic) None			
Carcinogenicity: None identified NTP? IARC Monographs? OSHA Regulation?			
Signs and Symptoms of Exposure Irritation to upper respiratory tract, skin, eyes			
Medical Conditions Generally Aggravated by Exposure None			
Emergency First Aid Procedures Ingestion: If conscious, give large amounts of water Eyes: Flush with water Inhalation: Move to fresh air Skin: Wash with soap and water			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in case Material is Released for Spilled Wear suitable protective clothing. Mop up spill and rinse with water, or collect in absorptive material and dispose of the absorptive material.			
Waste Disposal Method Dispose in accordance with all applicable federal, state, and local environmental regulations.			
Precautions to be Taken in Handling and Storing Avoid eye and skin contact.			
Other Precautions None			
Section VIII - Control Measures			
Respiratory Protection (Specify Type)			
Ventilation	Local Exhaust	Yes	Special
	Mechanical (General)	Yes	Other
Protective Gloves	Yes		Eye Protection
			Safety goggles
Other Protective Clothing or Equipment None			
Work/Hygienic Practices None			

 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.													
IDENTITY (As Used on Label and List) InstaStain® Methylene Blue													
Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.													
Section I Manufacturer's Name: EDVOTEK, Inc. Address (Number, Street, City, State, Zip Code): 14676 Rothgeb Drive, Rockville, MD 20850 Emergency Telephone Number: (301) 251-5990 Telephone Number for information: (301) 251-5990 Date Prepared: 04/01/06 Signature of Preparer (optional):													
Section II - Hazardous Ingredients/Identify Information Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) Methylene Blue 3,7 Bis (Dimethylamino) Phenothiazin 5 IUM Chloride No data available CAS # 61-73-4													
Section III - Physical/Chemical Characteristics <table border="1"> <tr> <td>Boiling Point</td> <td>No data</td> <td>Specific Gravity (H₂O = 1)</td> <td>No data</td> </tr> <tr> <td>Vapor Pressure (mm Hg.)</td> <td>No data</td> <td>Melting Point</td> <td>No data</td> </tr> <tr> <td>Vapor Density (AIR = 1)</td> <td>No data</td> <td>Evaporation Rate (Butyl Acetate = 1)</td> <td>No data</td> </tr> </table> Solubility in Water: Soluble - cold Appearance and Odor: Chemical bound to paper, no odor		Boiling Point	No data	Specific Gravity (H ₂ O = 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
Boiling Point	No data	Specific Gravity (H ₂ O = 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										
Section IV - Physical/Chemical Characteristics <table border="1"> <tr> <td>Flash Point (Method Used)</td> <td>Flammable Limits</td> <td>LEL</td> <td>UEL</td> </tr> <tr> <td>No data available</td> <td></td> <td>No data</td> <td>No data</td> </tr> </table> Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam Special Fire Fighting Procedures: Self contained breathing apparatus and protective clothing to prevent contact with skin and eyes Unusual Fire and Explosion Hazards: Emits toxic fumes under fire conditions		Flash Point (Method Used)	Flammable Limits	LEL	UEL	No data available		No data	No data				
Flash Point (Method Used)	Flammable Limits	LEL	UEL										
No data available		No data	No data										

Section V - Reactivity Data														
Stability	Unstable Stable	Conditions to Avoid 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 Will Not 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): Skin: May cause skin irritation Eyes: May cause eye irritation Inhalation: Cyanosis Carcinogenicity: NTP? IARC Monographs? OSHA Regulation? Meets criteria for proposed OSHA medical records rule PEREAC 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 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 VIII - Control Measures Respiratory Protection (Specify Type): MIOSH/OSHA approved, SCBA <table border="1"> <tr> <td>Ventilation</td> <td>Local Exhaust</td> <td>Special</td> </tr> <tr> <td></td> <td>Mechanical (General)</td> <td>Required</td> </tr> <tr> <td>Protective Gloves</td> <td>Rubber</td> <td>Eye Protection</td> </tr> <tr> <td></td> <td></td> <td>Chem. safety goggles</td> </tr> </table> Other Protective Clothing or Equipment: Rubber boots Work/Hygienic Practices:			Ventilation	Local Exhaust	Special		Mechanical (General)	Required	Protective Gloves	Rubber	Eye Protection			Chem. safety goggles
Ventilation	Local Exhaust	Special												
	Mechanical (General)	Required												
Protective Gloves	Rubber	Eye Protection												
		Chem. safety goggles												

 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.													
IDENTITY (As Used on Label and List) Practice Gel Loading Solution													
Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.													
Section I Manufacturer's Name: EDVOTEK, Inc. Address (Number, Street, City, State, Zip Code): 14676 Rothgeb Drive, Rockville, MD 20850 Emergency Telephone Number: (301) 251-5990 Telephone Number for information: (301) 251-5990 Date Prepared: 04/01/06 Signature of Preparer (optional):													
Section II - Hazardous Ingredients/Identify Information Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.													
Section III - Physical/Chemical Characteristics <table border="1"> <tr> <td>Boiling Point</td> <td>No data</td> <td>Specific Gravity (H₂O = 1)</td> <td>No data</td> </tr> <tr> <td>Vapor Pressure (mm Hg.)</td> <td>No data</td> <td>Melting Point</td> <td>No data</td> </tr> <tr> <td>Vapor Density (AIR = 1)</td> <td>No data</td> <td>Evaporation Rate (Butyl Acetate = 1)</td> <td>No data</td> </tr> </table> Solubility in Water: Soluble Appearance and Odor: Blue liquid, no odor		Boiling Point	No data	Specific Gravity (H ₂ O = 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
Boiling Point	No data	Specific Gravity (H ₂ O = 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										
Section IV - Physical/Chemical Characteristics <table border="1"> <tr> <td>Flash Point (Method Used)</td> <td>Flammable Limits</td> <td>LEL</td> <td>UEL</td> </tr> <tr> <td>No data</td> <td></td> <td>No data</td> <td>No data</td> </tr> </table> 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		Flash Point (Method Used)	Flammable Limits	LEL	UEL	No data		No data	No data				
Flash Point (Method Used)	Flammable Limits	LEL	UEL										
No data		No data	No data										

Section V - Reactivity Data																	
Stability	Unstable Stable	Conditions to Avoid None															
Incompatibility	None																
Hazardous Decomposition or Byproducts	Sulfur oxides, and bromides																
Hazardous Polymerization	May Occur Will Not 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): Acute eye contact: May cause irritation. No data available for other routes. Carcinogenicity: NTP? IARC Monographs? OSHA Regulation? No data available Signs and Symptoms of Exposure: May cause skin or eye irritation Medical Conditions Generally Aggravated by Exposure: None reported Emergency First Aid Procedures: Treat symptomatically and supportively. Rinse contacted area with copious amounts of water.																	
Section VII - Precautions for Safe Handling and Use Steps to be Taken in case Material is Released for Spilled: Wear eye and skin protection and mop spill area. Rinse with water. Waste Disposal Method: Observe all federal, state, and local regulations. Precautions to be Taken in Handling and Storing: Avoid eye and skin contact. Other Precautions: None																	
Section VIII - Control Measures Respiratory Protection (Specify Type): <table border="1"> <tr> <td>Ventilation</td> <td>Local Exhaust</td> <td>Yes</td> <td>Special</td> <td>None</td> </tr> <tr> <td></td> <td>Mechanical (General)</td> <td>Yes</td> <td>Other</td> <td>None</td> </tr> <tr> <td>Protective Gloves</td> <td>Yes</td> <td>Eye Protection</td> <td colspan="2">Splash proof goggles</td> </tr> </table> Other Protective Clothing or Equipment: None required Work/Hygienic Practices: Avoid eye and skin contact			Ventilation	Local Exhaust	Yes	Special	None		Mechanical (General)	Yes	Other	None	Protective Gloves	Yes	Eye Protection	Splash proof goggles	
Ventilation	Local Exhaust	Yes	Special	None													
	Mechanical (General)	Yes	Other	None													
Protective Gloves	Yes	Eye Protection	Splash proof goggles														

 <p>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.</p>			
IDENTITY (As Used on Label and List) Gel loading solution concentrate, 10x		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
Section I		Emergency Telephone Number (301) 251-5990	
Manufacturer's Name EDVOTEK, Inc.		Telephone Number for information (301) 251-5990	
Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850		Date Prepared 12-01-05	
		Signature of Preparer (optional)	
Section II - Hazardous Ingredients/Identify Information			
Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional)			
This product contains no hazardous materials as defined by the OSHA Hazard Communication Standard.			
Section III - Physical/Chemical Characteristics			
Boiling Point	No data	Specific Gravity (H ₂ O = 1)	No data
Vapor Pressure (mm Hg.)	No data	Melting Point	N/A
Vapor Density (AIR = 1)	No data	Evaporation Rate (Butyl 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 UEL 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			

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	None
Incompatibility None known			
Hazardous Decomposition or Byproducts Sulfur oxides and bromides			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	None
Section VI - Health Hazard Data			
Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes
Health Hazards (Acute and Chronic) Acute eye contact: May cause irritation No data available for other routes			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulation?
None	No data	No data	No data
Signs and Symptoms of Exposure May cause skin or eye irritation			
Medical Conditions Generally Aggravated by Exposure None reported			
Emergency First Aid Procedures Treat symptomatically and supportively Rinse contacted area with copious amounts of water.			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in case Material is Released for Spilled Rinse contacted area with copious amounts of water.			
Waste Disposal Method Observe all federal, state, and local regulations.			
Precautions to be Taken in Handling and Storing Avoid eye and skin contact.			
Other Precautions None			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) Chemical cartridge respirator with organic vapor cartridge.			
Ventilation	Local Exhaust	Yes	Special Yes
	Mechanical (General)	Yes	Other None
Protective Gloves	yes	Eye Protection	Splash proof goggles
Other Protective Clothing or Equipment None required			
Work/Hygienic Practices Do not ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.			

 <p>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.</p>			
IDENTITY (As Used on Label and List) 10x TE		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
Section I		Emergency Telephone Number (301) 251-5990	
Manufacturer's Name EDVOTEK, Inc.		Telephone Number for information (301) 251-5990	
Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850		Date Prepared 12-01-05	
		Signature of Preparer (optional)	
Section II - Hazardous Ingredients/Identify Information			
Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional)			
CAS # 139-33-3 NO data NO data NO data NO data			
Section III - Physical/Chemical Characteristics			
Boiling Point	NO data	Specific Gravity (H ₂ O = 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 Clear liquid, no odor			
Section IV - Physical/Chemical Characteristics			
Flash Point (Method Used)	NO data	Flammable Limits	LEL NO data UEL NO data
Extinguishing Media Dry chemical, carbon dioxide, halon, water spray or standard foam			
Special Fire Fighting Procedures Move container from fire area if possible			
Unusual Fire and Explosion Hazards Thermal decomposition products may include toxic and hazardous oxides of carbon, nitrogen and oxygen.			

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	Excessive heat, sparks or open flame
Incompatibility Acids, Aluminum, metals, oxidizers (strong)			
Hazardous Decomposition or Byproducts Thermal decomposition products of toxic and hazardous oxides of C, N, & Na			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	None
Section VI - Health Hazard Data			
Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	Yes	Yes
Health Hazards (Acute and Chronic) Moderately toxic by ingestion. Systemic toxicity may result. May cholate lead, magnesium, zinc and trace metals if present in intestine possibly causing increased absorption.			
Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulation?
None	No data	No data	No data
Signs and Symptoms of Exposure Mucous membrane irritation, eye/skin irritation, irritating to gastrointestinal system.			
Medical Conditions Generally Aggravated by Exposure Renal or heart disease, potassium deficiency, insulin dependent, diabetes, seizures or intracranial lesions.			
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 Mop up with absorptive material. Containerize to dispose of properly			
Waste Disposal Method Observe all federal, state, and local regulations.			
Precautions to be Taken in Handling and Storing Store away from strong oxidizers or heat. Avoid skin/eye contact.			
Other Precautions None			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) Chemical cartridge respirator with full facepiece and organic vapor cartridge			
Ventilation	Local Exhaust	Yes	Special None
	Mechanical (General)	Vent. Sys	Other None
Protective Gloves	Yes	Eye Protection	Splash-proof goggles
Other Protective Clothing or Equipment Impervious clothing to prevent skin contact			
Work/Hygienic Practices Emergency eye wash should be available			

 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.			
IDENTITY (As Used on Label and List) Ammonium Acetate		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
Section I		Emergency Telephone Number (301) 251-5990	
Manufacturer's Name EDVOTEK, Inc.		Telephone Number for information (301) 251-5990	
Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850		Date Prepared 12-01-05	
		Signature of Preparer (optional)	
Section II - Hazardous Ingredients/Identify Information			
Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) CAS# 631-61-8			
Section III - Physical/Chemical Characteristics			
Boiling Point	No data	Specific Gravity (H ₂ O = 1)	No data
Vapor Pressure (mm Hg.)	No data	Melting Point	110-112°C
Vapor Density (AIR = 1)	No data	Evaporation Rate (Butyl Acetate = 1)	No data
Solubility in Water			
Appearance and Odor Clear liquid			
Section IV - Physical/Chemical Characteristics			
Flash Point (Method Used)	Flammable Limits	LEL	UEL
Extinguishing Media Water spray, carbon dioxide, dry chemical powder or appropriate foam			
Special Fire Fighting Procedures Wear SCBA and protective clothing to prevent contact with skin and eyes.			
Unusual Fire and Explosion Hazards Emits toxic fumes under fire conditions			

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	protect from moisture
Incompatibility Strong oxidizing agents			
Hazardous Decomposition or Byproducts Carbon monoxide, carbon dioxide, nitrogen oxides			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	
Section VI - Health Hazard Data			
Route(s) of Entry: Inhalation? Skin? Ingestion?			
Yes Yes Yes			
Health Hazards (Acute and Chronic) Causes eye and skin irritation. Material irritating to mucous membranes and upper respiratory tract. We believe the chem, physical, & toxicological prop. have not been thoroughly inves.			
Carcinogenicity: NTP? IARC Monographs? OSHA Regulation?			
Signs and Symptoms of Exposure			
Medical Conditions Generally Aggravated by Exposure			
Emergency First Aid Procedures Immediately flush skin & eyes with copious amounts of water for at least 15 minutes. If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give O ₂			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in case Material is Released for Spilled Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.			
Waste Disposal Method Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped w/an afterburner and scrubber. Observe all federal, state and local laws.			
Precautions to be Taken in Handling and Storing			
Other Precautions			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) NIOSH/MSHA approved respirator			
Ventilation	Local Exhaust	Special	
	Mechanical (General)	Other	
Protective Gloves	safety gloves	Eye Protection	safety goggles
Other Protective Clothing or Equipment Wear rubber boots and heavy rubber gloves			
Work/Hygienic Practices Wash thoroughly after handling			

 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.			
IDENTITY (As Used on Label and List) Extraction Buffer		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.	
Section I		Emergency Telephone Number (301) 251-5990	
Manufacturer's Name EDVOTEK, Inc.		Telephone Number for information (301) 251-5990	
Address (Number, Street, City, State, Zip Code) 14676 Rothgeb Drive Rockville, MD 20850		Date Prepared 12-01-05	
		Signature of Preparer (optional)	
Section II - Hazardous Ingredients/Identify Information			
Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional) 5144-89-8 60-00-4 57-09-0			
Section III - Physical/Chemical Characteristics			
Boiling Point	100°C	Specific Gravity (H ₂ O = 1)	1.020
Vapor Pressure (mm Hg.)	No data	Melting Point	100°C
Vapor Density (AIR = 1)	No data	Evaporation Rate (Butyl Acetate = 1)	No data
Solubility in Water Yes			
Appearance and Odor Clear liquid			
Section IV - Physical/Chemical Characteristics			
Flash Point (Method Used)	Flammable Limits	LEL	UEL
Extinguishing Media Water spray			
Special Fire Fighting Procedures Wear SCBA and protective clothing to prevent contact w/ skin and eyes.			
Unusual Fire and Explosion Hazards Emits toxic fumes under fire conditions			

Section V - Reactivity Data			
Stability	Unstable		Conditions to Avoid
	Stable	X	
Incompatibility Strong oxidizing agents, protect from moisture			
Hazardous Decomposition or Byproducts Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen bromide gas			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	
Section VI - Health Hazard Data			
Route(s) of Entry: Inhalation? Skin? Ingestion?			
Yes Yes Yes			
Health Hazards (Acute and Chronic) Harmful if swallowed, inhaled, or absorbed through skin. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.			
Carcinogenicity: NTP? IARC Monographs? OSHA Regulation? N/A			
Signs and Symptoms of Exposure			
Medical Conditions Generally Aggravated by Exposure			
Emergency First Aid Procedures Immediately flush eyes or skin w/ copious amounts of water for at least 15 minutes while removing			
Section VII - Precautions for Safe Handling and Use			
Steps to be Taken in case Material is Released for Spilled Evacuate area. Cover with dry lime or soda ash-pick up. keep in a closed container and hold for waste disposal.			
Waste Disposal Method Dissolve or mix the material w/ combustible solvent and burn in a chemical incinerator equipped with an afterburner. Ventilate area and wash spill site after material pick up is complete			
Precautions to be Taken in Handling and Storing Observe all federal, state, and local laws.			
Other Precautions Use only in a chemical fume hood.			
Section VIII - Control Measures			
Respiratory Protection (Specify Type) Wear appropriate NIOSH/MSHA approved respirator.			
Ventilation	Local Exhaust	Special	
	Mechanical (General)	Other	
Protective Gloves	safety gloves	Eye Protection	safety goggles
Other Protective Clothing or Equipment Safety shower and eye bath, face shield			
Work/Hygienic Practices Wash thoroughly after handling, keep tightly closed.			

**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.

IDENTITY (As Used on Label and List)
2-Mercaptoethanol

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name
EDVOTEK, Inc.

Address (Number, Street, City, State, Zip Code)
**14676 Rothgeb Drive
Rockville, MD 20850**

Emergency Telephone Number
(301) 251-5990

Telephone Number for information
(301) 251-5990

Date Prepared
12-01-05

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identify Information

Hazardous Components [Specific Chemical Identity; Common Name(s)] OSHA PEL ACGIH TLV Other Limits Recommended % (Optional)

CAS# 60-24-2

Section III - Physical/Chemical Characteristics

Boiling Point For 1% solution	157° C	Specific Gravity (H ₂ O = 1)	1.114
Vapor Pressure (mm Hg.)	1MM 20°C	Melting Point	-
Vapor Density (AIR = 1)	2.69	Evaporation Rate (Butyl Acetate = 1)	

Solubility in Water

Appearance and Odor
Colorless liquid

Section IV - Physical/Chemical Characteristics

Flash Point (Method Used)	Flammable Limits	LEL	UEL
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Extinguishing Media
Carbon dioxide, dry chemical powder or appropriate foam.

Special Fire Fighting Procedures
Wear SCBA and protective clothing to prevent contact with skin and eyes

Unusual Fire and Explosion Hazards
Emits toxic fumes under fire conditions

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid Oxidizing agents, moisture
	Stable	

Incompatibility
Avoid contact with metals

Hazardous Decomposition or Byproducts
Sulfur oxides, carbon monoxide, carbon dioxide

Hazardous Polymerization	May Occur	Conditions to Avoid
	Will Not Occur	

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? Yes Skin? Yes Ingestion? Yes

Health Hazards (Acute and Chronic) May be fatal if inhaled or absorbed through skin. Harmful if swallowed. Causes severe irritation. High concentrations are extremely destructive to tissues of the mucous membranes.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulation?

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure

Emergency First Aid Procedures
Immediately flush eyes or skin with copious amounts of water.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in case Material is Released for Spilled
Cover w/an activated carbon absorbent, take up and place in closed container. Transport outdoors. Ventilate area and wash spill site after material pick up is complete.

Waste Disposal Method
This combustible material may be burner in a chemical incinerator equipped with afterburner & scrubber. Observe all federal, state and local environmental regulations.

Precautions to be Taken in Handling and Storing
Should be stored in glass lined or polyethylene lined containers to avoid contamination by metals.

Other Precautions
Use only in a chemical fume hood.

Section VIII - Control Measures

Respiratory Protection (Specify Type) NIOSH/MSHA approved respirator

Ventilation	Local Exhaust	Special
	Mechanical (General)	Other

Protective Gloves Safety gloves Eye Protection Safety goggles

Other Protective Clothing or Equipment

Work/Hygienic Practices Wash contaminated clothing before reuse