

### MATERIAL SAFETY DATA SHEET

#### SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

##### Millipore Corporation

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Bedford MA 01730

Information 781-533-2350

CHEMTREC Emergency Telephone Numbers:

United States 800-424-9300

International 703-527-3887 (collect)

##### PRODUCT: Montage DNA Gel Extraction Kit, Modified TAE Buffer

Product Number: **LSKMTAE50**

MSDS Number: **M102414**

Issue Date: July 12, 2002

Rev. Date: November 3, 2008

Revision: A

#### SUBSTANCE IDENTIFICATION

SUBSTANCE: "Tris Acetate – EDTA" Aqueous Solution, pH 8.

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS No.	EINECS No.	Percent by Wt.
"TRIS Base" – Tris (hydroxymethyl) aminomethane hydroxide	77-86-1	201-064-4	20-30
"Disodium EDTA", Disodium ethylenediamine-tetraacetate, dihydrate	6381-92-6	unlisted	<1.0
Acetic Acid	64-19-7	200-580-7	5-10
Water	7732-18-5	231-791-2	Balance

#### SECTION 3 – HAZARD IDENTIFICATION

##### EMERGENCY OVERVIEW:

Appearance: Colorless Liquid

Major Health Hazards: May cause eye, skin, respiratory tract and gastrointestinal irritation.

Physical Hazards: Not expected to present a physical hazard.

##### Health Effects

Route of Entry Potential Health Effects and Symptoms of Exposure

Skin: May cause irritation with burning pain, itching and redness.

Eyes: May cause eye irritation.

Ingestion May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation.

Target organs: None known

Medical Conditions None known

Aggravated by

Exposure:

#### SECTION 4 - FIRST AID

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid if irritation or symptoms occur. .

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Skin: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes)

Inhalation: Remove from exposure to fresh air immediately. Get medical aid if cough or other symptoms appear.

**SECTION 5 - FIRE FIGHTING MEASURES**

Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.

Extinguishing Media: Use media suitable for extinguishing surrounding fire.

Flash point: Not available.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Spills and Leaks: Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

**SECTION 7- HANDLING AND STORAGE**

Handling: Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes. Keep container tightly closed. Use with adequate ventilation.

Storage: Keep container closed when not in use. Store at room temperature.

**SECTION 8 - PERSONAL PROTECTION AND EXPOSURE CONTROL**

Ventilation: General ventilation should be adequate for the quantities found in this kit. If handling conditions are such that applicable exposure limits are exceeded, provide local exhaust ventilation.

Personal Protection: Wear safety glasses with side shields. Normally, gloves and protective clothing are not required when handling this solution. If danger of splashing exists, provide an emergency eye wash fountain and quick drench shower in the immediate work area

Respirator Use: Respirator use is typically not required. If mists can not be effectively controlled, wear a particulate filter approved under 42 CFR Part 84.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	Colorless solution
Specific Gravity (Water = 1.0)	1.05 – 1.10
Odor	Vinegar-like
Odor threshold	2 ppm (acetic acid)
Water solubility:	soluble
pH	8
Melting Point	Not Available
Boiling Point	Not Available
Vapor Pressure	Not Available
Vapor Density (Air = 1.0)	2.1 (acetic acid)
Volatility	>70%
Evaporation Rate	Not Available
Coefficient of water/oil distribution:	Not available

**SECTION 10 - STABILITY AND REACTIVITY**

Chemical Stability: Stable at normal temperatures and pressure.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Heat, and incompatible materials.

Incompatible with: Strong oxidizing agents, strong acids and strong bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides (NO<sub>x</sub>), ammonia, (NH<sub>3</sub>), and toxic fumes of sodium oxide.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Carcinogenicity: Tris (hydroxymethyl) aminomethane hydroxide, Disodium ethylenediamine-tetraacetate and acetic acid are not listed as carcinogenic by IARC, NIOSH, NTP, or OSHA.

Acute Effects: Possible eye, skin, respiratory tract and gastrointestinal irritation.

Chronic Effects: Prolonged or repeated skin contact may cause irritation.

Toxicological Information (continued)		
Exposure limits		
INGREDIENT	OSHA PEL	ACGIH TLV
Acetic Acid	10 ppm TWA	10 ppm TWA; 15 ppm STEL
Tris (hydroxymethyl) aminomethane hydroxide	None listed	None listed
Disodium ethylene- diaminetetraacetate	None listed	None listed

**Toxicological Data**

No toxicological data is available for this product as an entity.

Selected RTECS data for components:

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-; [Tris (hydroxymethyl) aminomethane hydroxide]	RTECS#: TY2900000
LD50, oral, rat	5,900 mg/kg
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate; [ Disodium ethylenediamine-tetraacetate, dihydrate]	RTECS#: AH4410000
Cytogenetic analysis, lung, hamster:	Mutagen; 200 mg/L
Acetic acid	RTECS#: AF1225000
LD50, oral, rat	3,310 mg/kg
LC50, inhalation, mouse	5,620 ppm/1H
LD50, skin, rabbit	1,060 uL/kg

**SECTION 12 - ECOLOGICAL INFORMATION**

No data is available on the Ecotoxicity or Environmental Fate of this solution

**SECTION 13- DISPOSAL INFORMATION**

The components of this product are not listed USEPA hazardous wastes, and the solution does not exhibit the properties of a characteristic hazardous waste. Wastes should be disposed of in a manner consistent with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

Montage DNA Gel Extraction Kit, Modified TAE Buffer is not regulated by USDOT, ICAO/IATA, ADR or IMO as a hazardous material or dangerous goods.

**SECTION 15 - REGULATORY INFORMATION**

The components of this solution are listed on the Toxic Substances Control Act (TSCA) Chemical Inventory. See regulations in 40 CFR 700 for details.

California No significant Risk Level: None of the chemicals in this product are listed

European Labeling in Accordance with EC Directives:

Hazard Symbols: None applicable

Risk Phrases: None applicable

Safety Phrases: None applicable

This product has a WHMIS classification of Not Classified.

**SECTION 16- ADDITIONAL INFORMATION**

The chemical, physical and toxicological properties of this product have not been thoroughly investigated.

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