

## Material Safety Data Sheet

Version 1.0

Revision Date: 05/28/2016

### Product and Company Identification

**Product Name:** DNA Size Standard  
**Product Use:** For Research Use Only. Not for use in diagnostic procedures.  
**Company:** Molecular Cloning Laboratories(MCLAB)  
320 Harbor Way  
South San Francisco  
CA 94080  
**Telephone:** 888-MCLAB-88  
650-871-8771  
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### Composition/Information on Ingredients

Components	EINECS #	CAS #	Weight%	EU Classification
Disodium ethylenediaminetetraacetate (Na <sub>2</sub> EDTA)	205-358-3	139-33-3	1.3-17	Xn: R22; Xi: R36/37/38

### Hazards Identification

**Emergency Overview:** Small pieces of soft gel suspended in buffer

**Health Effects:**

- Inhalation: Mists may cause irritation to the upper respiratory system. Symptoms may include coughing and scratchy throat.
- Skin: Can cause irritation. Symptoms may include redness, rash, and itching.
- Eyes: Can cause eye irritation. Symptoms may include redness, tearing, and pain.
- Ingestion: May cause nausea and discomfort.
- Chronic Effects/Target Organ Effects: None known
- Medical Conditions Aggravated By Exposure: None known
- Environmental Effects: None known

### First Aid Measures

**Inhalation:** Follow standard care for a respiratory emergency as necessary. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Skin:** Follow standard care for skin contact as needed. Immediately wash thoroughly with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms develop. Wash clothing and shoes before reuse, or discard in a manner which limits further exposure.

**Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation persists.

**Ingestion:** If swallowed, get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

### *Fire Fighting Measures*

**Extinguishing Media:** Dry chemical, fire-fighting foam, water spray, or carbon dioxide based on surrounding materials.

**Special Exposure Hazards:** This product is water-based. Under fire conditions the organic residue remaining after the water evaporates is expected to burn generating toxic and irritating gases and smoke. Evacuate area and fight fire from safe distance.

**Special Protective Equipment:** Wear approved pressure-demand self-contained breathing apparatus and full protective gear.

### *Accidental Release Measures*

**Personal Precautions:** Prevent skin/eye contact. Use personal protective equipment as needed. Isolate spill area, preventing entry by unauthorized persons.

**Environmental Precautions:** Minimize entry of material into sewers and drainage systems. Refer to permit discharge limitations if applicable.

**Methods For Cleaning Up:** Clean up spills immediately, observing precautions in the material safety data sheet and label. Use absorbent materials if needed and dispose into a chemical waste container.

### *Handling and Storage*

**Handling:** Use with adequate ventilation as necessary or desired. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions. Follow precautions for packaging that may product residues. Avoid contact with skin and eyes.

**Storage:** Keep container closed when not in use. Store at 2 to 8°C.

**Specific Uses:** For R&D/experimental use only

### *Exposure Controls/Personal Protection*

**Exposure Limit Values:** None established

**Exposure Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls as needed.

**Respiratory Protection:** Use an approved air-purifying respirator as needed. Consult with respirator manufacturer to determine respirator selection, use, and limitations.

**Eye/Face Protection:** Use safety glasses. Where contact with the eyes is likely, use chemical goggles.

**Skin/Hand Protection:** Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

### *Physical and Chemical Properties*

Appearance: ..... Soft gel in buffer

Odor: ..... None

Flash Point: ..... Not available (water-based product)

Viscosity: ..... Not available.

Solubility: ..... Buffer is miscible with water; plugs are not soluble in water

Density (water = 1): .. 1.0

Partition Coefficient: . Not available.

Boiling Point: ..... ~100°C

Melting Point: ..... Buffer: 0°C; Plugs: 70°C

pH: ..... 7-8

Other: ..... Not available.

### ***Stability and Reactivity***

**Stability:** Stable.

**Conditions To Avoid:** Avoid contact with strong oxidizers and acids.

**Materials To Avoid:** Strong oxidizers and acids.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen.

**Toxicological Information:** Na<sub>2</sub> EDTA: Oral LD50: 2,000 mg/kg (rat)

### ***Ecological Information***

**Ecotoxicity:** Not available

**Mobility:** Not available

**Persistence And Degradability:** Not available

**Bioaccumulative Potential:** Not available

### ***Disposal Considerations***

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

**Transport Information:** Not expected to be hazardous for transport

### ***Regulatory Information***

#### **US Regulations:**

- This product meets the following SARA 311/312 hazard categories: acute.
- This product contains the following SARA 302 Extremely Hazardous Substances: none.
- This product contains the following SARA 313 Toxic Chemicals: none.
- This product contains the following CERCLA Hazardous Substances: none.

Not all components of this product are listed on the TSCA inventory. This product is for R&D and experimental uses only and must be used under the supervision of a technically qualified individual. Other uses are not authorized.

#### **EU Regulations:**

This preparation meets the dangerous preparations classification criteria under 1999/45/EC:

Xi: R36/38: Irritating to eyes and skin.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately.

Not all components of this product are listed on EINECS.

#### **Canadian Regulations:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and it contains the information required by the CPR.

This product meets WHMIS classification criteria D2B.

Not all components of this product are listed on the DSL.

### ***Other Information***

**NFPA/HMIS Ratings:** Health = 2; Fire = 1; Reactivity = 0; NFPA/Special = None

End of MSDS