

Material Safety Data Sheet

Precast Agarose Gel Cassette with Ethidium Bromide

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Section 1. Product and Company Information

Product Name: Pippin Prep™ Precast Agarose Gel Cassettes with Buffer Solution
 Product Numbers: CSD7510, CSD1510, CSD2010, CSD3010

Unit Size: Precast agarose gels cassettes (10/bx) contain (enclosed in styrene plastic):
 ~ 10ml agarose gel with ~5ug/ml ethidium bromide
 ~10 ml Tris-TAPS buffer solution with ~5ug/ml ethidium bromide
 DNA fragments (unlabeled) - 1 tube:
 <200ug DNA in 400- 600 ul of Tris-TAPS buffer
 Loading Solution – 1 tube:
 ~750 ul Ficoll in water
 Additional Tris-TAPS Electrophoresis buffer- 1 bottle:
 ~30 ml, with ~5ug/ml ethidium bromide

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Section 2. Composition, Information on Ingredients

CAS-No.	EC-No.	Chemical Name	Concentration
1239-45-8	214-984-6	3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide (Ethidium Bromide)	0.013% (5.0 ug/ml)
9012-36-6	232-731-8	Agarose	0.5-3%
77-86-1	201-064-4	Tris (hydroxymethyl)aminomethane (Tris)	<5%
29915-38-6	249-954-1	3-(Tris(hydroxymethyl)methylamino)propane-1-sulphonic acid (TAPS)	<5%
6381-92-6	205-358-3	Ethylenediaminetetraacetic acid disodium dehydrate (EDTA)	<1%
9007-49-2		Deoxyribonucleic acid (DNA)*	<1 µg
26873-85-8		Polysucrose (Ficoll)	<30%
7732-18-5	231-791-2	Water	>90%

* DNA markers are manufactured with either synthetic oligonucleotides or phage (lambda) or bacterial (e.coli) DNA that has been digested with restriction enzymes. Animal or plant DNA are not used.

Section 3. Hazards Identification

Emergency Overview- ethidium bromide

Appearance: faint red-orange liquid.

Warning! May be harmful if swallowed.

Target Organs: No data found.

OSHA Hazards

Irritant

HMIS Classification

Health Hazard: 2

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 2

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: Not applicable
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation
Ingestion: May be harmful if swallowed.

Section 4. First Aid Measures

General Advice: Move out of dangerous area.
Inhalation: Not applicable
Skin: Wash with soap rinse with plenty of water.
Eyes: Flush eyes with water as a precaution
Ingestion: Rinse mouth with water.

Section 5. Fire-Fighting Measures

Flammable Properties

Flash Point: No data available
Ignition Temperature: No data available

Suitable extinguishing media

Not applicable

Special protective equipment for fire-fighters

Not applicable

Section 6. Accidental Release Measures

Personal precautions

Avoid dust formation

Environmental precautions

Do not let product enter drains

Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion.

Storage

Store in a cool, dry, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Contains no substance with occupational exposure limit values.
Facilities using this substance should be equipped with an eye-wash station.

Personal protective equipment

Respiratory protection: Respiratory protection is not required.

Hand protection: Handle with gloves.

Eye protection: Use safety glasses with side-shield conforming to OSHA 29 CFR 1910.133 and European Standard EN-166

Clothing: Wear appropriate clothing to prevent skin exposure.

Section 9. Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Light red-orange
Odor:	None
pH:	No data available
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Ignition temperature:	No data available
Lower explosion limit:	No data available
Upper explosion limit:	No data available

Section 10. Stability and Reactivity**Storage Stability**

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents.

Hazardous decompositions products

Hazardous decomposition products formed under fire conditions: Carbon oxides, nitrogen oxides.

Section 11. Toxicological Information**Toxicity**

Ethidium Bromide: LC50 (inhalation, rat): 0.0118 - 0.1340 mg/L/6H. LD50 (oral, rat): 1503 mg/kg., By mists determined to be toxic based on: LC50 (inhalation rat) 0.0472mg/L/1H * 100 (dilution rate)=approximately 4.72mg/L/1H. RTECS# ZC0110000.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: Possible mutagenic effect in humans. Mutagenic in bacteria (Ames Test) with high exposure.

Neurotoxicity: No information found

Section 12. Ecological Information

No information available.

Section 13. Disposal Considerations**Product**

Observe all federal, stated, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Confer with laboratory safety officer (if applicable), dispose as other ethidium stained gels.

Contaminated packaging

Dispose of as unused product.

Section 14. Transport Information**DOT (US)**

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

Section 15. Regulatory Information

US Federal

OSHA

Irritant. Not considered highly hazardous.

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that are reportable under SARA Title III, Section 313.

US State

Materials are not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

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

TSCA

This product does not contain components listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

Clean Air Act

This material does not contain any hazardous air pollutants or Ozone depleters.

Clean Water Act

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

Canada

DSL Status

This product does not contain components that are on the Canadian DSL or NDSL lists.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Risk Phrases

R 68 Possible risk of irreversible effects.

Safety Phrases

S 24/25 Avoid contact with skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water

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