

## Material Safety Data Sheet

### Pippin Prep Replacement Reagent Kits:

#### For agarose gel cassettes with ethidium bromide dye DNA

Version: 4

Creation Date: 10/16/12

Revision Date: 07/29/15

### Section 1. Product and Company Information

Product Name: Reagent Replacement kit for Pippin Prep Gel Cassettes

Product Numbers: RPK7510 (Marker D)

RPK1510 (Marker A)

RPK2010 (Marker B)

RSQ2010 (Marker S)

RPK3010 (Marker C)

Product Details: 1 tube, Electrophoresis buffer solution, 1 tube, DNA size marker in buffer solution, 1 tube, Sample loading solution (water with Ficoll)

Company: Sage Science, Inc.  
Suite 2400  
500 Cummings Center  
Beverly, MA 01915 USA

Telephone: 978.922.1832

Fax: 617.812.0540

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### Section 2. Composition, Information on Ingredients

Solution containing the following components:

Buffer Solution and DNA marker

CAS-No.	EC-No.	Chemical Name	Concentration
1239-45-8	214-984-6	Ethidium Bromide (3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide)	0.013% (5.0 µg/ml)
77-86-1	201-064-4	Tris (hydroxymethyl)aminomethane	<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%
7732-18-5	231-791-2	Water	>90%
9007-49-2		Deoxyribonucleic acid DNA*	<1 µg

Loading Solution

CAS-No.	EC-No.	Chemical Name	Concentration
26873-85-8		Ficoll	<30%
7732-18-5	231-791-2	Water	>70%

\* DNA markers are manufactured with either synthetic oligonucleotides or bacterial (e.coli) plasmid DNA that has been restriction digested. Animal or plant DNA are not used for this product.

### Section 3. Hazards Identification

#### Emergency Overview

Appearance: red-orange liquid.

**Warning!** Harmful May cause eye, skin, and respiratory tract irritation. 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.  
**Eyes:** Causes eye irritation  
**Ingestion:** May be harmful if swallowed.

### Section 4. First Aid Measures

**General Advice:** Rinse skin, or exposed area with water.  
**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. Never give anything by mouth to an unconscious person.

### Section 5. Fire-Fighting Measures

#### Flammable Properties

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

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire-fighting if necessary.

## 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

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

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

Stable under recommended storage conditions.

**Materials to avoid**

None

**Hazardous decompositions products**

None

**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

**Section 16. Other Information**

This information in this document is believed to be correct and current at the date of its authorship or revision. The information does not imply guarantee or warranty but should be used as a guide only. Users of this product should conduct their own investigations into safety precautions and local disposal requirements. Sage Science Inc., shall not be held liable for and damage from handling on contact with the product.