

## Kit ingredients

Product: PureYield™ Plasmid Miniprep System, 100 preps

Product code: A1223

Substance number	Description	Count	Symbols
A160	Elution Buffer (EBB)	1	-
A167	PureYield™ Collection Tubes - Article, MSDS not available.	1	-
A166	PureYield™ Minicolumns - Article, MSDS not available.	1	-
A158	Endotoxin Removal Wash (ERB)	1	Xn F
A157	Neutralization Solution (NSC)	1	Xn
A145	Cell Lysis Buffer (CLC)	1	C
A159	Column Wash Solution (CWC)	1	-



**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

\* **1 Identification of substance**

**Trade name:** Elution Buffer (EBB)

**Article number:** A160

**Application of the substance / the preparation:** Laboratory chemicals

**Manufacturer/Supplier:**

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-608-274-4330  
1-800-356-9526

**MSDS author:** Regulatory.Affairs@promega.com

**Further information obtainable from:**

Promega UK Ltd.  
Delta House  
Southampton Science Park  
Southampton SO16 7NS  
UNITED KINGDOM  
Tel: (44) 23 8076 0225  
Fax: (44) 23 8076 7014  
FREEPHONE: 0800 378994  
E-mail Address: ukcustserve@promega.com  
Web Address: www.promega.com/uk/

**Information in case of emergency:**

CHEMTREC 1-800-424-9300

For call originating outside the United States dial 001-703-527-3887

\* **2 Hazards identification**

**GHS label elements** Void

**3 Composition/information on ingredients**

**Chemical characterization**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Components:** Void

**4 First aid measures**

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Generally the product does not irritate the skin.

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Trade name: **Elution Buffer (EBB)**

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*After eye contact: Rinse opened eye for several minutes under running water.**After swallowing: If symptoms persist consult doctor.***5 Fire fighting measures****Suitable extinguishing agents:***CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***Protective equipment:** *No special measures required.***6 Accidental release measures****Person-related safety precautions:** *Not required.***Measures for environmental protection:** *Dilute with plenty of water.***Measures for cleaning/collecting:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).***Additional information:** *No dangerous substances are released.***7 Handling and storage****Handling****Information for safe handling:** *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***Storage****Requirements to be met by storerooms and receptacles:** *No special requirements.***Information about storage in one common storage facility:** *Not required.***Further information about storage conditions:** *None.***8 Exposure controls and personal protection gear****Additional information about design of technical facilities:** *No further data; see item 7.***Ingredients with limit values that require monitoring at the workplace:***The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.***Additional information:** *The lists valid during the making were used as basis.***Personal protective equipment****General protective and hygienic measures***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Protection of hands:***Protective gloves.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation***Material of gloves:***The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.***Penetration time of glove material:***The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

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Trade name: *Elution Buffer (EBB)*

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*Eye protection: Goggles recommended during refilling.***9 Physical and chemical properties****General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic

**Change in condition**

<b>Melting point/Melting range:</b>	0°C
<b>Boiling point/Boiling range:</b>	undetermined

<b>Flash point:</b>	Not applicable
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<b>Self-igniting:</b>	Product is not selfigniting.
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<b>Danger of explosion:</b>	Product does not present an explosion hazard.
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<b>Density at 20°C:</b>	1 g/cm <sup>3</sup>
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<b>Solubility in / Miscibility with Water:</b>	Fully miscible
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<b>pH-value at 20°C:</b>	8.5
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**Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	99.9 %

<b>Solids content:</b>	0.2 %
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**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Dangerous reactions:** No dangerous reactions known**Dangerous decomposition products:** No dangerous decomposition products known**11 Toxicological information****Acute toxicity:****Primary irritant effect:***on the skin: No irritant effect.**on the eye: Irritating effect.***Sensitization:** No sensitizing effects known.**12 Ecological information****General notes:** Generally not hazardous for water.

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**Trade name: Elution Buffer (EBB)**

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**13 Disposal considerations****Product:****Recommendation**

Smaller quantities can be disposed of with household waste.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**14 Transport information**

Contact Promega Safety Department for additional transport information.

UN "Model Regulation": -

**15 Regulations****Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals  
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

**National regulations**

**Waterhazard class:** Generally not hazardous for water.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:**

Promega Corporation  
Safety Department  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.

**Contact:**

Promega UK  
Delta House, Enterprise Road  
Chilworth Science Park  
Southampton SO16 7NS  
UNITED KINGDOM  
Free Phone +44 800 559900  
Free Fax +44 800 181037

**Abbreviations and acronyms:** GHS: Globally Harmonized System of Classification and Labelling of Chemicals

\* Data compared to the previous version altered.

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

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Revision: 08.06.2009

\* **1 Identification of substance**

**Trade name:** Endotoxin Removal Wash (ERB)

**Article number:** A158

**Application of the substance / the preparation:** Laboratory chemicals

**Manufacturer/Supplier:**

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-608-274-4330  
1-800-356-9526

**MSDS author:** Regulatory.Affairs@promega.com

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**Information in case of emergency:**

CHEMTREC 1-800-424-9300

For call originating outside the United States dial 001-703-527-3887

\* **2 Hazards identification**

**GHS label elements**



**Danger**

H225 - Highly flammable liquid and vapour.



**Warning**

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

**Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

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**Trade name: Endotoxin Removal Wash (ERB)**

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- P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264 Wash thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

- P301+P312 **IF SWALLOWED:** Call a POISON CENTER or doctor/physician if you feel unwell.  
 P302+P352 **IF ON SKIN:** Wash with plenty of soap and water.  
 P303+P361+P353 **IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P321 Specific treatment (see on this label).  
 P330 Rinse mouth.  
 P332+P313 **If skin irritation occurs:** Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370+P378 **In case of fire:** Use for extinction: CO<sub>2</sub>, powder or water spray.

**Storage:**

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

**Disposal:**




- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

**Chemical characterization**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Components:**

CAS: 50-01-1 EINECS: 200-002-3	guanidinium chloride	Warning:  3.1.O/4, 3.2/2, 3.3/2	25-50%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol	Danger:  2.6/2 Warning:  3.3/2, 3.8/3	25-50%

### 4 First aid measures

**General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:** Immediately wash with soap, water and rinse thoroughly.

**After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:** Call for a doctor immediately.

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Trade name: **Endotoxin Removal Wash (ERB)**

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## 5 Fire fighting measures

### Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

## 6 Accidental release measures

**Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

### Measures for environmental protection:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

### Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

## 7 Handling and storage

### Handling

#### Information for safe handling:

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

No special precautions are necessary if used correctly.

#### Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

### Storage

**Requirements to be met by storerooms and receptacles:** Store in a cool location.

**Information about storage in one common storage facility:** Not required.

#### Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

## 8 Exposure controls and personal protection gear

**Additional information about design of technical facilities:** No further data; see item 7.

### Ingredients with limit values that require monitoring at the workplace:

#### 67-63-0 propan-2-ol

WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm

Long-term value: 999 mg/m<sup>3</sup>, 400 ppm

**Additional information:** The lists valid during the making were used as basis.

### Personal protective equipment

#### General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

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**Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**Protection of hands:**

Protective gloves.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Tightly sealed goggles.

## 9 Physical and chemical properties

### General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic

### Change in condition

<b>Melting point/Melting range:</b>	undetermined
<b>Boiling point/Boiling range:</b>	82°C

**Flash point:** ≤ 21°C

**Ignition temperature:** 425°C

**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.  
Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

### Explosion limits:

<b>Lower:</b>	2.0 Vol %
<b>Upper:</b>	12.0 Vol %

**Vapour pressure at 20°C:** 43 hPa

**Density at 20°C:** 1.05055 g/cm<sup>3</sup>

### Solubility in / Miscibility with

**Water:** Fully miscible

**pH-value at 20°C:** 5.2

### Solvent content:

<b>Organic solvents:</b>	35.0 %
<b>Water:</b>	28.0 %

**Solids content:** 37.0 %

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Trade name: Endotoxin Removal Wash (ERB)

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**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Dangerous reactions:** Reacts with strong acids and oxidizing agents**Dangerous decomposition products:** No dangerous decomposition products known**11 Toxicological information****Acute toxicity:****LD/LC50 values relevant for classification:****50-01-1 guanidinium chloride**

Oral	LD50	475 mg/kg (Rat)
Irritation of eyes	acute	500 mg (Rabbit)

**Primary irritant effect:****on the skin:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.**12 Ecological information****General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**13 Disposal considerations****Product:****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agents:** Water, if necessary together with cleansing agents.**\* 14 Transport information**

Contact Promega Safety Department for additional transport information.

UN "Model Regulation": UN1219, ISOPROPANOL (ISOPROPYL ALCOHOL), solution, 3, II

**\* 15 Regulations****Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

**Hazard-determining components of labelling:**

guanidinium chloride

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**Trade name: Endotoxin Removal Wash (ERB)**

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**Risk phrases:**

- 11 Highly flammable.  
22 Harmful if swallowed.  
36/38 Irritating to eyes and skin.  
67 Vapours may cause drowsiness and dizziness.

**Safety phrases:**

- 7/9 Keep container tightly closed and in a well-ventilated place.  
16 Keep away from sources of ignition - No smoking.  
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
25 Avoid contact with eyes.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
60 This material and its container must be disposed of as hazardous waste.

**National regulations**

Class	Share in %
Water	28.0
NK	35.0

**Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:**

Promega Corporation  
Safety Department  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.

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Promega UK  
Delta House, Enterprise Road  
Chilworth Science Park  
Southampton SO16 7NS  
UNITED KINGDOM  
Free Phone +44 800 559900  
Free Fax +44 800 181037

**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

\* Data compared to the previous version altered.

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

\* **1 Identification of substance**

**Trade name:** Neutralization Solution (NSC)

**Article number:** A157

**Application of the substance / the preparation:** Laboratory chemicals

**Manufacturer/Supplier:**

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-608-274-4330  
1-800-356-9526

**MSDS author:** Regulatory.Affairs@promega.com

**Further information obtainable from:**

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**Information in case of emergency:**

CHEMTREC 1-800-424-9300

For call originating outside the United States dial 001-703-527-3887

\* **2 Hazards identification**

**GHS label elements**



**Warning**

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

**Prevention:**

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see on this label).

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**Trade name: Neutralization Solution (NSC)**

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P330 Rinse mouth.  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.

**Disposal:**





P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

**Chemical characterization**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Components:**

CAS: 50-01-1 EINECS: 200-002-3	guanidinium chloride	Warning:  3.1.O/4, 3.2/2, 3.3/2	20-25%
	Trade Secret 001-4036	Warning:  3.2/2, 3.3/2, 3.8/3	1.0-5.0%
	Trade Secret 002-4036	Danger:  3.2/1A Warning:  3.1.O/4, 3.1.I/4	1.0-5.0%

### 4 First aid measures

**General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:** Immediately wash with soap, water and rinse thoroughly.

**After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:** Call for a doctor immediately.

### 5 Fire fighting measures

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

### 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 7 Handling and storage

**Handling****Information for safe handling:**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

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**Trade name: Neutralization Solution (NSC)**

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*Prevent formation of aerosols.**No special precautions are necessary if used correctly.***Information about fire - and explosion protection:** *No special measures required.***Storage****Requirements to be met by storerooms and receptacles:** *No special requirements.***Information about storage in one common storage facility:** *Not required.***Further information about storage conditions:** *Keep receptacle tightly sealed.***8 Exposure controls and personal protection gear****Additional information about design of technical facilities:** *No further data; see item 7.***Ingredients with limit values that require monitoring at the workplace:***The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.***Additional information:** *The lists valid during the making were used as basis.***Personal protective equipment****General protective and hygienic measures***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.**Avoid contact with the eyes and skin.***Respiratory protection:***In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.***Protection of hands:***Protective gloves.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation***Material of gloves:***The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.***Penetration time of glove material:***The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.***Eye protection:** *Tightly sealed goggles.***9 Physical and chemical properties****General Information**

<b>Form:</b>	<i>Fluid</i>
<b>Colour:</b>	<i>Colourless</i>
<b>Odour:</b>	<i>Characteristic</i>

**Change in condition****Melting point/Melting range:** *undetermined***Boiling point/Boiling range:** *undetermined***Flash point:** *Not applicable***Self-igniting:** *Product is not selfigniting.*

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Trade name: Neutralization Solution (NSC)

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**Danger of explosion:** Product does not present an explosion hazard.

**Density:** Not determined

**Solubility in / Miscibility with Water:** Not miscible or difficult to mix

**pH-value at 20°C:** 3.8

**Solvent content:**

**Organic solvents:** 0.0 %

**Water:** 65.9 %

### 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous reactions:** No dangerous reactions known

**Dangerous decomposition products:** No dangerous decomposition products known

### 11 Toxicological information

**Acute toxicity:**

**LD/LC50 values relevant for classification:**

**50-01-1 guanidinium chloride**

Oral	LD50	475 mg/kg (Rat)
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Irritation of eyes	acute	500 mg (Rabbit)
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**Primary irritant effect:**

**on the skin:** Irritant to skin and mucous membranes.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

### 12 Ecological information

**General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

**Product:**

**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

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**Trade name: Neutralization Solution (NSC)**

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**14 Transport information**

Contact Promega Safety Department for additional transport information.

**15 Regulations****Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

**Risk phrases:**

22 Harmful if swallowed.  
36/38 Irritating to eyes and skin.

**Safety phrases:**

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37 Wear suitable protective clothing and gloves.  
60 This material and its container must be disposed of as hazardous waste.

**National regulations**

**Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Free Phone +44 800 559900  
Free Fax +44 800 181037

**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

**\* Data compared to the previous version altered.**

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

**1 Identification of substance****Trade name:** Cell Lysis Buffer (CLC)**Article number:** A145**Application of the substance / the preparation:** Laboratory chemicals**Manufacturer/Supplier:**

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-608-274-4330  
1-800-356-9526

**MSDS author:** Regulatory.Affairs@promega.com**Further information obtainable from:**

Promega UK Ltd.  
Delta House  
Southampton Science Park  
Southampton SO16 7NS  
UNITED KINGDOM  
Tel: (44) 23 8076 0225  
Fax: (44) 23 8076 7014  
FREEPHONE: 0800 378994  
E-mail Address: ukcustserve@promega.com  
Web Address: www.promega.com/uk/

**Information in case of emergency:**

CHEMTREC 1-800-424-9300

For call originating outside the United States dial 001-703-527-3887

**2 Hazards identification****GHS label elements****Danger**

H314 - Causes severe skin burns and eye damage.

**Prevention:**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P304+P340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 **Immediately call a POISON CENTER or doctor/physician.**

P321 **Specific treatment (see on this label).**

P363 **Wash contaminated clothing before reuse.**

**Storage:**  
P405 Store locked up.

**Disposal:**  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

#### Chemical characterization

**Description:** Mixture of substances listed below with nonhazardous additions.

#### Components:

CAS: 151-21-3 EINECS: 205-788-1	sodium dodecyl sulphate	Warning: ⚠ 3.1.O/4, 3.1.D/4, 3.2/2, 3.3/2	5-10%
CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide	Danger: ⚠ 3.2/1A	<2.50%

### 4 First aid measures

**General information:** Immediately remove any clothing soiled by the product.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:** Immediately wash with soap, water and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

### 5 Fire fighting measures

#### Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

### 6 Accidental release measures

**Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

**Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.

#### Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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Trade name: Cell Lysis Buffer (CLC)

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## 7 Handling and storage

### Handling

#### Information for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**Information about fire - and explosion protection:** No special measures required.

### Storage

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

## 8 Exposure controls and personal protection gear

**Additional information about design of technical facilities:** No further data; see item 7.

### Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

WEL Short-term value: 2 mg/m<sup>3</sup>

**Additional information:** The lists valid during the making were used as basis.

### Personal protective equipment

#### General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

#### Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

#### Protection of hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Tightly sealed goggles.

## 9 Physical and chemical properties

### General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic

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**Safety Data Sheet**  
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Trade name: Cell Lysis Buffer (CLC)

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**Change in condition****Melting point/Melting range:** undetermined**Boiling point/Boiling range:** undetermined**Flash point:** Not applicable**Self-igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Density:** Not determined**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix**pH-value at 20°C:** 13**Solvent content:****Organic solvents:** 0.0 %**Water:** 90.9 %**10 Stability and reactivity****Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.**Dangerous reactions:** No dangerous reactions known**Dangerous decomposition products:** No dangerous decomposition products known**11 Toxicological information****Acute toxicity:****LD/LC50 values relevant for classification:****1310-73-2 sodium hydroxide**

Oral LD50 2000 mg/kg (Rat)

Irritation of skin acute 500 mg/ 24H (Rabbit)

**Primary irritant effect:****on the skin:** Caustic effect on skin and mucous membranes.**on the eye:**

Strong caustic effect.

Irritating effect.

**Sensitization:** No sensitizing effects known.**12 Ecological information****General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

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**Trade name: Cell Lysis Buffer (CLC)**

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Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

**13 Disposal considerations****Product:****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

Contact Promega Safety Department for additional transport information.

UN "Model Regulation": UN1824, SODIUM HYDROXIDE SOLUTION, 8, II

**15 Regulations****Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

**Hazard-determining components of labelling:**

sodium hydroxide

**Risk phrases:**

34 Causes burns.

**Safety phrases:**

20 When using do not eat or drink.

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

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

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

60 This material and its container must be disposed of as hazardous waste.

**National regulations**

**Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:**

Promega Corporation

Safety Department

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

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**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

**Trade name: Cell Lysis Buffer (CLC)**

(Contd. of page 5)

**Contact:**

Promega UK  
Delta House, Enterprise Road  
Chilworth Science Park  
Southampton SO16 7NS  
UNITED KINGDOM  
Free Phone +44 800 559900  
Free Fax +44 800 181037

**Abbreviations and acronyms:**

GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent

**\* Data compared to the previous version altered.**

GB

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

**1 Identification of substance**

**Trade name:** Column Wash Solution (CWC)

**Article number:** A159

**Application of the substance / the preparation:** Laboratory chemicals

**Manufacturer/Supplier:**

Promega Corporation  
2800 Woods Hollow Road  
Madison, WI 53711  
U.S.A.  
1-608-274-4330  
1-800-356-9526

**MSDS author:** Regulatory.Affairs@promega.com

**Further information obtainable from:**

Promega UK Ltd.  
Delta House  
Southampton Science Park  
Southampton SO16 7NS  
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Fax: (44) 23 8076 7014  
FREEPHONE: 0800 378994  
E-mail Address: ukcustserve@promega.com  
Web Address: www.promega.com/uk/

**Information in case of emergency:**

CHEMTREC 1-800-424-9300  
For call originating outside the United States dial 001-703-527-3887

**2 Hazards identification**

**GHS label elements**


Safety data sheet available on request.

**3 Composition/information on ingredients**

**Chemical characterization**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Components:**

CAS: 1185-53-1	Tris(hydroxymethyl)aminomethane hydrochloride	<2.00%
EINECS: 214-684-5	Warning:  3.2/2, 3.3/2, 3.8/3	

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

Trade name: Column Wash Solution (CWC)

(Contd. of page 1)

## 4 First aid measures

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Generally the product does not irritate the skin.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** If symptoms persist consult doctor.

## 5 Fire fighting measures

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.

## 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** No special measures required.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Additional information:** No dangerous substances are released.

## 7 Handling and storage

**Handling**

**Information for safe handling:** No special measures required.

**Information about fire - and explosion protection:** No special measures required.

**Storage**

**Requirements to be met by storerooms and receptacles:** No special requirements.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** None.

## 8 Exposure controls and personal protection gear

**Additional information about design of technical facilities:** No further data; see item 7.

**Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** The lists valid during the making were used as basis.

**Personal protective equipment**

**General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals.

**Respiratory protection:** Not required.

**Protection of hands:**

Protective gloves.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 3)

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

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**Trade name: Column Wash Solution (CWC)**

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**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Goggles recommended during refilling.

## 9 Physical and chemical properties

### General Information

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Characteristic

### Change in condition

<b>Melting point/Melting range:</b>	0°C
<b>Boiling point/Boiling range:</b>	100°C

**Flash point:** Not applicable

**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Density at 20°C:** 1 g/cm<sup>3</sup>

### Solubility in / Miscibility with

**Water:** Not miscible or difficult to mix

**pH-value at 20°C:** 8.2

### Solvent content:

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	98.5 %

## 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous reactions:** No dangerous reactions known

**Dangerous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

**Acute toxicity:****Primary irritant effect:**

**on the skin:** No irritant effect.

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

GB

(Contd. on page 4)

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.06.2009

Revision: 08.06.2009

**Trade name: Column Wash Solution (CWC)**

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### 12 Ecological information

**General notes:** Generally not hazardous for water.

### 13 Disposal considerations

**Product:**

**Recommendation**

Smaller quantities can be disposed of with household waste.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

### \* 14 Transport information

Contact Promega Safety Department for additional transport information.

### 15 Regulations

**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

**Special labelling of certain preparations:**

Safety data sheet available for professional user on request.

**National regulations**

**Waterhazard class:** Generally not hazardous for water.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing MSDS:**

Promega Corporation

Safety Department

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

**Contact:**

Promega UK

Delta House, Enterprise Road

Chilworth Science Park

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UNITED KINGDOM

Free Phone +44 800 559900

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**Abbreviations and acronyms:** GHS: Globally Harmonized System of Classification and Labelling of Chemicals

\* Data compared to the previous version altered.