

**Kit ingredients**

Product: Wizard® MagneSil Tfx™ System, 4x96 preps

Product code: A2380

<b>Substance number</b>	<b>Description</b>	<b>Count</b>	<b>Symbols</b>
A164	MagneSil® Red	1	Xn
A219	Endotoxin Removal Resin	1	-
A220	MagneSil® Paramagnetic Particles	1	-
A222	4/40 Wash Solution	1	Xn
A711	Cell Resuspension Solution (CRA)	1	-
A712	Cell Lysis Solution (CLA)	1	Xi
A713	Neutralization Solution (NSA)	1	-
P119	Nuclease-Free Water	2	-



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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** MagneSil® Red

**Article number:** A164

**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**

**Hazard description:**



Xn Harmful

**Information concerning to particular hazards to man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

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according to 1907/2006/EC, Article 31

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Trade name: MagneSil® Red

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## 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	✘ Xn, ✘ Xi; R 22-36/38	50-75%
CAS: 1309-37-1 EINECS: 215-168-2	diiron trioxide	✘ Xi; R 36/37/38	1.0-5.0%

**Additional information:** For the wording of the listed risk phrases refer to section 16.

## 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:

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:** No special measures required.

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Trade name: MagneSil® Red

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

**Change in condition****Melting point/Melting range:** undetermined**Boiling point/Boiling range:** 100°C**Flash point:** Not applicable**Self-igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Density:** Not determined

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**Safety Data Sheet**  
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**Trade name: MagneSil® Red**

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<b>Solubility in / Miscibility with Water:</b>	Fully miscible
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<b>pH-value at 20°C:</b>	5.4
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<b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	29.6 %

<b>Solids content:</b>	70.4 %
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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 oxidizing agents

Reacts with strong acids and oxidizing agents

**Dangerous decomposition products:**

Carbon monoxide and carbon dioxide

Hydrogen chloride (HCl)

Nitrogen oxides (NO<sub>x</sub>)

## 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.

**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Harmful

Irritant

## 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.

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**Safety Data Sheet**  
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Revision: 24.06.2008

Trade name: MagneSil® Red

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### 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.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

### \* 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

**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.

**Relevant R-phrases**

22 Harmful if swallowed.

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: MagneSil® Red**

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*36/37/38 Irritating to eyes, respiratory system and skin.**36/38 Irritating to eyes and skin.***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***\* Data compared to the previous version altered.**

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** Endotoxin Removal Resin

**Article number:** A219

**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.  
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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**

**Hazard description:** not applicable

**Information concerning to particular hazards to man and environment**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

**3 Composition/information on ingredients**

**Chemical characterization**

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

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# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 24.06.2008

Revision: 24.06.2008

Trade name: Endotoxin Removal Resin

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**Components:**

CAS: 1309-37-1	diiron trioxide	☒ Xi; R 36/37/38	5-10%
EINECS: 215-168-2			

**Additional information:** For the wording of the listed risk phrases refer to section 16.

## 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:** 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).

**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.

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# Safety Data Sheet

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**Trade name: Endotoxin Removal Resin**

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**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.

**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

**Melting point/Melting range:** undetermined

**Boiling point/Boiling range:** 100°C

**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:** 4

### Solvent content:

**Organic solvents:** 0.1 %

**Water:** 84.5 %

**Solids content:** 10.3 %

## 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.

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**Safety Data Sheet**  
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Revision: 24.06.2008

**Trade name: Endotoxin Removal Resin**

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**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

**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**

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.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

**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.

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GB

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Endotoxin Removal Resin**

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**National regulations****Technical instructions (air):**

Class	Share in %
Water	84.5
II	0.1

**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.*

**Relevant R-phrases**

36/37/38 Irritating to eyes, respiratory system and skin.

**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

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

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** MagneSil® Paramagnetic Particles

**Article number:** A220

**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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Tel: (44) 23 8076 0225  
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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**

**Hazard description:** not applicable

**Information concerning to particular hazards to man and environment**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

**3 Composition/information on ingredients**

**Chemical characterization**

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

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# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 24.06.2008

Revision: 24.06.2008

Trade name: MagneSil® Paramagnetic Particles

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**Components:**

CAS: 1309-37-1	diiron trioxide	☒ Xi; R 36/37/38	5-10%
EINECS: 215-168-2			

**Additional information:** For the wording of the listed risk phrases refer to section 16.

## 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:** 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).

**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.

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# Safety Data Sheet

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**Trade name: MagneSil® Paramagnetic Particles**

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**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.

**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>	undetermined
<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:** Not determined

### Solubility in / Miscibility with

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

### Solvent content:

<b>Organic solvents:</b>	0.1 %
<b>Water:</b>	84.9 %

**Solids content:** 10.3 %

## 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.

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: MagneSil® Paramagnetic Particles**

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**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 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**

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.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

## 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.

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: MagneSil® Paramagnetic Particles**

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**National regulations****Technical instructions (air):**

Class	Share in %
Water	84.9
II	0.1

**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.*

**Relevant R-phrases**

36/37/38 Irritating to eyes, respiratory system and skin.

**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

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

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** *4/40 Wash Solution*

**Article number:** A222

**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.  
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Southampton Science Park  
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Tel: (44) 23 8076 0225  
Fax: (44) 23 8076 7014  
FREEPHONE: 0800 378994  
E-mail Address: [ukcustserve@promega.com](mailto:ukcustserve@promega.com)  
Web Address: [www.promega.com/uk/](http://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**

**Hazard description:**



*Xn Harmful*

**Information concerning to particular hazards to man and environment**

*The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.*

*R 22 Harmful if swallowed.*

*R 36/38 Irritating to eyes and skin.*

**Classification system:**

*The classification is in line with current EC lists. It is extended, by information from technical literature and company information.*

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 24.06.2008

Revision: 24.06.2008

Trade name: 4/40 Wash Solution

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### 3 Composition/information on ingredients

#### Chemical characterization

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

#### Components:

CAS: 50-01-1	guanidinium chloride	☒ Xn, ☒ Xi; R 22-36/38	50-75%
EINECS: 200-002-3			

**Additional information:** For the wording of the listed risk phrases refer to section 16.

### 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:

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:** 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.

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Trade name: 4/40 Wash Solution

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

**Change in condition**

**Melting point/Melting range:** undetermined

**Boiling point/Boiling range:** 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:** 1.2 g/cm<sup>3</sup>

**Solubility in / Miscibility with Water:** Fully miscible

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**Safety Data Sheet**  
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Trade name: 4/40 Wash Solution

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**Solvent content:**

**Organic solvents:** 0.0 %  
**Water:** 33.0 %

**Solids content:** 67.0 %

**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:**

Hydrogen chloride (HCl)

Nitrogen oxides (NO<sub>x</sub>)

**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)
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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.

**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Harmful

Irritant

**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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**Safety Data Sheet**  
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Trade name: 4/40 Wash Solution

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

### 14 Transport information

Contact Promega Safety Department for additional transport information.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

### 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

**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.

**Relevant R-phrases**

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

**Department issuing MSDS:**

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

(Contd. on page 6)

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: 4/40 Wash Solution**

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

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** Cell Resuspension Solution (CRA)

**Article number:** A711

**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**

**Hazard description:** not applicable

**Information concerning to particular hazards to man and environment**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

**3 Composition/information on ingredients**

**Chemical characterization**

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

**Components:** Void

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**Safety Data Sheet**  
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**Trade name: Cell Resuspension Solution (CRA)**

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**Additional information:** For the wording of the listed risk phrases refer to section 16.

#### 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**  
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**Trade name: Cell Resuspension Solution (CRA)**

(Contd. of page 2)

**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

<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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**Solubility in / Miscibility with**

<b>Water:</b>	Not miscible or difficult to mix
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<b>pH-value at 20°C:</b>	0
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**Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	98.9 %

<b>Solids content:</b>	1.1 %
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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.

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**Safety Data Sheet**  
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**Trade name: Cell Resuspension Solution (CRA)**

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**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 12 Ecological information

**General notes:**

Generally not hazardous for water.

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

## 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.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

## 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.

GB  
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**Safety Data Sheet**  
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**Trade name: Cell Resuspension Solution (CRA)**

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### 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

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

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** Cell Lysis Solution (CLA)

**Article number:** A712

**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**

**Hazard description:**



Xi Irritant

**Information concerning to particular hazards to man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/38 Irritating to eyes and skin.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

# Safety Data Sheet

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Trade name: Cell Lysis Solution (CLA)




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### 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	 Xn,  Xi; R 21/22-36/38	<2.00%
CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide	 C; R 35	<1.00%

**Additional information:** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

**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:** 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.

### 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).

Ensure adequate ventilation.

### 7 Handling and storage

#### Handling

##### Information for safe handling:

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:** 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.

GB

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Trade name: Cell Lysis Solution (CLA)

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## 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 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>	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

### Solvent content:

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	98.2 %

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**Safety Data Sheet**  
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Trade name: Cell Lysis Solution (CLA)

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Solids content: 1.8 %

**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:** Irritant to skin and mucous membranes.**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

**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.**14 Transport information**

Contact Promega Safety Department for additional transport information.

**Land transport ADR/RID (cross-border)**

ADR/RID class: Not regulated

**Maritime transport IMDG:**

Marine pollutant: No

\* GB  
(Contd. on page 5)

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

Printing date 24.06.2008

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**Trade name: Cell Lysis Solution (CLA)**

(Contd. of page 4)

**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:**

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.

37 Wear suitable 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.

**Relevant R-phrases**

21/22 Harmful in contact with skin and if swallowed.

35 Causes severe burns.

36/38 Irritating to eyes and skin.

**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

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

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

Printing date 24.06.2008

Revision: 24.06.2008

**1 Identification of substance****Trade name:** Neutralization Solution (NSA)**Article number:** A713**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****Hazard description:** not applicable**Information concerning to particular hazards to man and environment**


The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

**3 Composition/information on ingredients****Chemical characterization****Description:** Mixture of substances listed below with nonhazardous additions.**Components:**

acetic acid

 C; R 35 | 5-10%

(Contd. on page 2)

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

Printing date 24.06.2008

Revision: 24.06.2008

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

(Contd. of page 1)

**Additional information:** For the wording of the listed risk phrases refer to section 16.

#### 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:** 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).

**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

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# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 24.06.2008

Revision: 24.06.2008

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

(Contd. of page 2)

**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**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** 100°C

**Flash point:** Not applicable

**Ignition temperature:** 485°C

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

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

**Density at 20°C:** 0.9515 g/cm<sup>3</sup>

**Solubility in / Miscibility with**

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

**pH-value at 20°C:** 5

**Solvent content:**

<b>Organic solvents:</b>	7.0 %
<b>Water:</b>	80.0 %

**Solids content:** 13.0 %

## 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.

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

Printing date 24.06.2008

Revision: 24.06.2008

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

(Contd. of page 3)

**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 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**

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.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -  
Not regulated

**Maritime transport IMDG:**

**IMDG Class:** -  
**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

## 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.

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

Printing date 24.06.2008

Revision: 24.06.2008

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

(Contd. of page 4)

**National regulations****Technical instructions (air):**

Class	Share in %
Water	80.0
II	7.0

**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.*

**Relevant R-phrases**

35 Causes severe burns.

**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

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

GB

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

Printing date 24.06.2008

Revision: 24.06.2008

\* **1 Identification of substance**

**Trade name:** Nuclease-Free Water

**Article number:** P119

**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**

**Hazard description:** not applicable

**Information concerning to particular hazards to man and environment** not applicable

**Classification system:**

The classification is in line with current EC lists. It is extended, by information from technical literature and company information.

**3 Composition/information on ingredients**

**Chemical characterization:**

**CAS No. Description:**

7732-18-5 water, distilled, conductivity or of similar purity

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**Safety Data Sheet**  
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**Trade name: Nuclease-Free Water**

**Identification number(s):**  
**EEC Number: 231-791-2**

(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:** 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:** Not required.  
**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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Nuclease-Free Water**

(Contd. of page 2)

**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.

**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>	Odourless

### Change in condition

**Melting point/Melting range:** 0°C  
**Boiling point/Boiling range:** 100°C

**Flash point:** Not applicable

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

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

### Solubility in / Miscibility with

<b>Water:</b>	Fully miscible
<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	100.0 %

## 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.

#### Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

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

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Nuclease-Free Water**

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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.

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

### \* 14 Transport information

Contact Promega Safety Department for additional transport information.

**Land transport ADR/RID (cross-border)**

**ADR/RID class:** -

Not regulated

**Maritime transport IMDG:**

**Marine pollutant:** No

### 15 Regulations

**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The substance is not subject to classification according to EU lists and other sources of literature known to us.

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.

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**Safety Data Sheet**  
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**Trade name: Nuclease-Free Water**

(Contd. of page 4)

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

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