

07/04/2016

### Kit Components

Product code	Description
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<b>M8901</b>	<b>5X Colorless GoTaq® Flexi Reaction Buffer</b>
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Components:

M890	5X Colorless GoTaq® Flexi Buffer
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**Safety Data Sheet**  
*acc. to OSHA HCS*

Printing date 07/04/2016

Reviewed on 06/27/2016

\* **1 Identification**

**Product identifier**

**Trade name:** *5X Colorless GoTaq® Flexi Buffer*

**Article number:** *M890*

**Application of the substance / the mixture** *Laboratory chemicals*

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**

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

**Information department:** *SDS author: Regulatory.Affairs@promega.com*

**Emergency telephone number:**

*For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)*

\* **2 Hazard(s) identification**

**Classification of the substance or mixture**

*The product is not classified as hazardous according to the Globally Harmonized System (GHS).*

**Label elements**

**GHS label elements** *Void*

**Hazard pictograms** *Void*

**Signal word** *Void*

**Hazard statements** *Void*

**Classification system:**

**NFPA ratings (scale 0 - 4)**

*Health = 0*

*Fire = 1*

*Reactivity = 0*

**HMIS-ratings (scale 0 - 4)**

*Health = 0*

*Fire = 1*

*Reactivity = 0*

**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** *Not applicable*

**Target Organ(s):** *Not applicable or unknown*

**Other hazards**

*This mixture has not been tested to determine the overall health hazard; therefore in accordance with 29CFR1910.1200, the data reported above pertains to the hazardous ingredients of this mixture.*

**Results of PBT and vPvB assessment**

**PBT:** *Not applicable.*

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**vPvB:** Not applicable.

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### 3 Composition/information on ingredients

**Chemical characterization: Mixtures**

**Description:**

The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances. The exact concentration percentages of the hazardous substances may be withheld as a Promega Corp. trade secret.

**Dangerous components:**

57-50-1	sucrose, pure	25-50%
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**Additional information:** For the wording of the listed risk phrases refer to section 15.

### 4 First-aid measures

**Description of first aid measures**

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

**After inhalation:** If the patient feels unwell or is concerned, obtain medical advice.

**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 the patient feels unwell or is concerned, obtain medical advice.

**Information for doctor:**

**Most important symptoms and effects, both acute and delayed** None

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing agents:**

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

**Special hazards arising from the substance or mixture** None known

**Advice for firefighters**

No special advice

No special advice

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

### 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Not required.

**Environmental precautions:**

Dilute with plenty of water.

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

**Methods and material for containment and cleaning up:**

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

**Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling.

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See Section 13 for disposal information.

## 7 Handling and storage

### Handling:

**Precautions for safe handling** No special measures required.

**Information about protection against explosions and fires:** No special measures required.

**Conditions for safe storage, including any incompatibilities**

### 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.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

### Control parameters

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

**57-50-1 sucrose, pure**

PEL Long-term value: 15\* 5\*\* mg/m<sup>3</sup>  
\*total dust \*\*respirable fraction

REL Long-term value: 10\* 5\*\* mg/m<sup>3</sup>  
\*total dust \*\*respirable fraction

TLV Long-term value: 10 mg/m<sup>3</sup>

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

### Exposure controls

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

**Breathing equipment:** Not required.

**Protection of hands:** Not required.

**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.

**Eye protection:** Not required.

## 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	Colorless
<b>Odor:</b>	Not determined
<b>Odor threshold:</b>	Not determined.

<b>pH-value at 20 °C (68 °F):</b>	8.5
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**Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.  
**Flash point:** > 100 °C (> 212 °F)

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:**

**Decomposition temperature:** Not determined.

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:**

Product does not present an explosion hazard.

**Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**Vapor pressure:** Not determined.

**Density at 20 °C (68 °F):** 1.203 g/cm<sup>3</sup> (10.039 lbs/gal)

**Relative density:** Not determined.

**Vapor density:** Not determined.

**Evaporation rate:** Not determined.

**Solubility in / Miscibility with**

**Water:** Fully miscible.

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**Organic solvents:** 0.0 %

**Water:** 43.7 %

**Solids content:** 56.3 %

**Other information:** No further relevant information available.

## 10 Stability and reactivity

**Reactivity:** No further relevant information available.

**Chemical stability**

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

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

**Information on toxicological effects****Acute toxicity:**

**LD/LC50 values that are relevant for classification:** No data available

**Primary irritant effect:**

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

**on the eye:** Irritating effect.

**Sensitization:** No sensitizing effects known.

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**Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

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

**Carcinogenic categories****IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

**NTP (National Toxicology Program)**

None of the ingredients are listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

## \* 12 Ecological information

**Toxicity**

**Aquatic toxicity:** Not harmful to the aquatic environment

**Persistence and degradability** Not available

**Behavior in environmental systems:**

**Bioaccumulative potential** Not known

**Mobility in soil** No further relevant information available.

**Ecotoxicological effects:**

**Remark:** Not available

**Additional ecological information:****General notes:**

Water hazard class 1 (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.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

## \* 13 Disposal considerations

**Waste treatment methods****Recommendation:**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

**Uncleaned packagings:**

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

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

## \* 14 Transport information

**UN-Number**

Not hazardous for transportation

**DOT, ADR, ADN, IMDG, IATA**

Void

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<b>UN proper shipping name</b>	None
<b>DOT, ADR, ADN, IMDG, IATA</b>	Void

<b>Transport hazard class(es)</b>	None
<b>DOT, ADR, ADN, IMDG, IATA Class</b>	Void

<b>Packing group</b>	None
<b>DOT, ADR, IMDG, IATA</b>	Void

<b>Environmental hazards:</b>	
<b>Marine pollutant:</b>	No

<b>Special precautions for user</b>	Not applicable.
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<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
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<b>UN "Model Regulation":</b>	Void
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## 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**  
Sara

**Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

**Section 313 (Specific toxic chemical listings):**

7783-20-2	ammonium sulphate
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**TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**Proposition 65**

**Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Carcinogenicity categories**

**EPA (Environmental Protection Agency)**

None of the ingredients are listed.

**TLV (Threshold Limit Value established by ACGIH)**

57-50-1	sucrose, pure	A4
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**NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

**GHS label elements** Void

**Signal word** Void

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**Hazard statements** Void

**National regulations:**

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

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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 SDS:**

Promega Corporation

Environmental Health and Safety Department

2800 Woods Hollow Road

Madison, WI

Ph: (608)274-4330

**Date of preparation / last revision** 07/04/2016 / -

**Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

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