

Product code	Description
DG4650	PowerPlex® Matrix Standards, 3100/3130

Components:

DG805	CXR Matrix
DG806	TMR Matrix
DG807	JOE Matrix
DG808	Fluorescein Matrix
P119	Nuclease-Free Water

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/03/2016

1: Identification**1.1 Product identifier****Trade name:** CXR Matrix**Article number:** DG805**Application of the substance / the mixture** Laboratory chemicals**1.3 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**1.4 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**2.1 Classification of the substance or mixture****Classification according to the Hazard Communication Standard (HCS)**

The product is not classified as hazardous according to the HCS regulation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008** Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable**Target Organ(s):** Not applicable or unknown**2.3 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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Trade name: CXR Matrix

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vPvB: Not applicable.

3: Composition/information on ingredients

3.2 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 are withheld as a Promega Corp. trade secret.

Dangerous components: Void

Additional information: For the wording of the listed risk phrases refer to section 15.

4: First-aid measures

4.1 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.

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

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture None known

5.3 Advice for firefighters No special advice

Protective equipment: No special measures required.

6: Accidental release measures

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

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

7: Handling and storage

7.1 Precautions for safe handling No special measures required.

Information about protection against explosions and fires: The product is not flammable.

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Trade name: CXR Matrix

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7.2 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.**7.3 Specific end use(s)** No further relevant information available.

8: Exposure controls/personal protection

8.1 Control parameters**Components 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 that were valid during the creation were used as basis.**8.2 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

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

pH-value at 20 °C (68 °F): 9**Change in condition**

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.

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.

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Trade name: CXR Matrix

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Upper: Vapor pressure:	Not determined. Not determined.
Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with	Not determined. Not determined. Not determined. Not determined. Not determined.
Water: Partition coefficient (n-octanol/water): Viscosity:	Fully miscible. Not determined.
Dynamic: Kinematic:	Not determined. Not determined.
Organic solvents: Water:	0.0 % 99.8 %
Solids content: 9.2 Other information	0.2 % No further relevant information available.

10: Stability and reactivity

- 10.1 Reactivity** No further relevant information available.
- 10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions** No dangerous reactions known.
- 10.4 Conditions to avoid** No further relevant information available.
- 10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11: Toxicological information

- 11.1 Information on toxicological effects**
- Acute toxicity:** Based on available data, the classification criteria are not met.
- LD/LC50 values that are relevant for classification:** No data available
- Primary irritant effect:**
- on the skin:** Based on available data, the classification criteria are not met.
- on the eye:** Based on available data, the classification criteria are not met.
- Sensitization:** Based on available data, the classification criteria are not met.
- Additional toxicological information:**

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.

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Trade name: CXR Matrix

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12: Ecological information

12.1 Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

12.2 Persistence and degradability Not available

12.3 Bioaccumulative potential Not known

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Generally not hazardous for water.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

13.1 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

14.1 UN-Number Not hazardous for transportation

DOT, ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name None

DOT, ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es) None

DOT, ADR, ADN, IMDG, IATA
Class Void

14.4 Packing group None

DOT, ADR, IMDG, IATA Void

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": Void

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Trade name: CXR Matrix

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15: Regulatory information

15.1 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):

None of the ingredients are listed.

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)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

National regulations:

Water hazard class: Generally not hazardous for water.

15.2 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

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)
ICAO: International Civil Aviation Organization
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

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Trade name: CXR Matrix

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DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
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.**

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/03/2016

1: Identification**1.1 Product identifier****Trade name:** TMR Matrix**Article number:** DG806**Application of the substance / the mixture** Laboratory chemicals**1.3 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**1.4 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**2.1 Classification of the substance or mixture****Classification according to the Hazard Communication Standard (HCS)**

The product is not classified as hazardous according to the HCS regulation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008** Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable**Target Organ(s):** Not applicable or unknown**2.3 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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Trade name: TMR Matrix

vPvB: Not applicable.

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3: Composition/information on ingredients

3.2 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 are withheld as a Promega Corp. trade secret.

Dangerous components: Void

Additional information: For the wording of the listed risk phrases refer to section 15.

4: First-aid measures

4.1 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.

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

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture None known

5.3 Advice for firefighters No special advice

Protective equipment: No special measures required.

6: Accidental release measures

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

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

7: Handling and storage

7.1 Precautions for safe handling No special measures required.

Information about protection against explosions and fires: The product is not flammable.

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Trade name: TMR Matrix

(Contd. of page 2)

7.2 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.**7.3 Specific end use(s)** No further relevant information available.

8: Exposure controls/personal protection

8.1 Control parameters**Components 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 that were valid during the creation were used as basis.**8.2 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

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

pH-value at 20 °C (68 °F): 8**Change in condition**

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.

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.

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Safety Data Sheet

acc. to OSHA HCS

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Trade name: TMR Matrix

(Contd. of page 3)

Upper: Not determined.
Vapor pressure: Not determined.

Density: Not determined.
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: 99.8 %

Solids content: 3.0 %
9.2 Other information: No further relevant information available.

10: Stability and reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical stability:

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

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

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

Primary irritant effect:

on the skin: Based on available data, the classification criteria are not met.

on the eye: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

Additional toxicological information:

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.

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Safety Data Sheet

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Trade name: TMR Matrix

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12: Ecological information

12.1 Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

12.2 Persistence and degradability Not available

12.3 Bioaccumulative potential Not known

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Generally not hazardous for water.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

13.1 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

14.1 UN-Number Not hazardous for transportation

DOT, ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name None

DOT, ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es) None

DOT, ADR, ADN, IMDG, IATA

Class Void

14.4 Packing group None

DOT, ADR, IMDG, IATA Void

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": Void

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Trade name: TMR Matrix

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15: Regulatory information

15.1 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):

None of the ingredients are listed.

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)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

National regulations:

Water hazard class: Generally not hazardous for water.

15.2 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

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)
ICAO: International Civil Aviation Organization
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

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Trade name: TMR Matrix

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DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
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.**

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/03/2016

1: Identification

1.1 Product identifier

Trade name: JOE Matrix

Article number: DG807

Application of the substance / the mixture Laboratory chemicals

1.3 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

1.4 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

2.1 Classification of the substance or mixture

Classification according to the Hazard Communication Standard (HCS)

The product is not classified as hazardous according to the HCS regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Classification system:

NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

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

Target Organ(s): Not applicable or unknown

2.3 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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Trade name: **JOE Matrix**

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vPvB: Not applicable.

3: Composition/information on ingredients

3.2 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 are withheld as a Promega Corp. trade secret.

Dangerous components: Void

Additional information: For the wording of the listed risk phrases refer to section 15.

4: First-aid measures

4.1 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.

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

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture None known

5.3 Advice for firefighters No special advice

Protective equipment: No special measures required.

6: Accidental release measures

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

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

7: Handling and storage

7.1 Precautions for safe handling No special measures required.

Information about protection against explosions and fires: The product is not flammable.

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Safety Data Sheet

acc. to OSHA HCS

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Reviewed on 02/03/2016

Trade name: JOE Matrix

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7.2 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.**7.3 Specific end use(s)** No further relevant information available.

8: Exposure controls/personal protection

8.1 Control parameters**Components 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 that were valid during the creation were used as basis.**8.2 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

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

pH-value at 20 °C (68 °F): 8**Change in condition**

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.

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.

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-US

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Trade name: JOE Matrix

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Upper:	Not determined.
Vapor pressure:	Not determined.

Density:	Not determined.
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:	99.8 %

Solids content:	0.2 %
9.2 Other information	No further relevant information available.

10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

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

Primary irritant effect:

on the skin: Based on available data, the classification criteria are not met.

on the eye: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

Additional toxicological information:

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.

US

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Reviewed on 02/03/2016

Trade name: JOE Matrix

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12: Ecological information

12.1 Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

12.2 Persistence and degradability Not available

12.3 Bioaccumulative potential Not known

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Generally not hazardous for water.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

13.1 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

14.1 UN-Number

Not hazardous for transportation

DOT, ADR, ADN, IMDG, IATA

Void

14.2 UN proper shipping name

None

DOT, ADR, ADN, IMDG, IATA

Void

14.3 Transport hazard class(es)

None

DOT, ADR, ADN, IMDG, IATA

Class

Void

14.4 Packing group

None

DOT, ADR, IMDG, IATA

Void

14.5 Environmental hazards:

Marine pollutant:

No

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

UN "Model Regulation":

Void

US
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Trade name: **JOE Matrix**

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15: Regulatory information

15.1 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):

None of the ingredients are listed.

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)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

National regulations:
Water hazard class: Generally not hazardous for water.

15.2 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

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)

ICAO: International Civil Aviation Organization

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

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Trade name: JOE Matrix

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DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
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.**

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/03/2016

1: Identification**1.1 Product identifier****Trade name:** Fluorescein Matrix**Article number:** DG808**Application of the substance / the mixture** Laboratory chemicals**1.3 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**1.4 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**2.1 Classification of the substance or mixture****Classification according to the Hazard Communication Standard (HCS)**

The product is not classified as hazardous according to the HCS regulation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008** Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable**Target Organ(s):** Not applicable or unknown**2.3 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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Trade name: Fluorescein Matrix

(Contd. of page 1)

vPvB: Not applicable.

3: Composition/information on ingredients

3.2 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 are withheld as a Promega Corp. trade secret.

Dangerous components: Void

Additional information: For the wording of the listed risk phrases refer to section 15.

4: First-aid measures

4.1 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.

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

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture None known

5.3 Advice for firefighters No special advice

Protective equipment: No special measures required.

6: Accidental release measures

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

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

7: Handling and storage

7.1 Precautions for safe handling No special measures required.

Information about protection against explosions and fires: The product is not flammable.

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Reviewed on 02/03/2016

Trade name: Fluorescein Matrix

(Contd. of page 2)

7.2 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.

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

8: Exposure controls/personal protection

8.1 Control parameters

Components 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 that were valid during the creation were used as basis.

8.2 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

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

pH-value at 20 °C (68 °F): 8

Change in condition

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.

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.

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acc. to OSHA HCS

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Reviewed on 02/03/2016

Trade name: *Fluorescein Matrix*

(Contd. of page 3)

Upper: Not determined.
Vapor pressure: Not determined.

Density: Not determined.
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: 99.8 %

Solids content: 0.2 %
9.2 Other information: No further relevant information available.

* 10: Stability and reactivity

- 10.1 Reactivity:** No further relevant information available.
10.2 Chemical stability:
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: No dangerous decomposition products known.

* 11: Toxicological information

- 11.1 Information on toxicological effects**
Acute toxicity: Based on available data, the classification criteria are not met.
LD/LC50 values that are relevant for classification: No data available
Primary irritant effect:
on the skin: Based on available data, the classification criteria are not met.
on the eye: Based on available data, the classification criteria are not met.
Sensitization: Based on available data, the classification criteria are not met.
Additional toxicological information:

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.

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Safety Data Sheet

acc. to OSHA HCS

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Reviewed on 02/03/2016

Trade name: *Fluorescein Matrix*

(Contd. of page 4)

12: Ecological information

12.1 Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

12.2 Persistence and degradability Not available

12.3 Bioaccumulative potential Not known

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: *Not available*

Additional ecological information:

General notes: *Generally not hazardous for water.*

12.5 Results of PBT and vPvB assessment

PBT: *Not applicable.*

vPvB: *Not applicable.*

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

13: Disposal considerations

13.1 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

14.1 UN-Number *Not hazardous for transportation*

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

14.2 UN proper shipping name *None*

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

14.3 Transport hazard class(es) *None*

DOT, ADR, ADN, IMDG, IATA
Class *Void*

14.4 Packing group *None*

DOT, ADR, IMDG, IATA *Void*

14.5 Environmental hazards:

Marine pollutant: *No*

14.6 Special precautions for user *Not applicable.*

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code *Not applicable.*

UN "Model Regulation": *Void*

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Safety Data Sheet

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Reviewed on 02/03/2016

Trade name: Fluorescein Matrix

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15: Regulatory information

15.1 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):

None of the ingredients are listed.

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)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

National regulations:
Water hazard class: Generally not hazardous for water.

15.2 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

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)
 ICAO: International Civil Aviation Organization
 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

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Trade name: Fluorescein Matrix

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DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
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.**

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/02/2016

1: Identification

1.1 Product identifier

Trade name: Nuclease-Free Water

Article number: P119

CAS Number:

7732-18-5

EC number:

231-791-2

Application of the substance / the mixture Laboratory chemicals

1.3 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

1.4 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

2.1 Classification of the substance or mixture

Classification according to the Hazard Communication Standard (HCS)

The substance is not classified as hazardous according to the HCS regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Classification system:

NFPA ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

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

Target Organ(s): Not applicable or unknown

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/02/2016

Trade name: Nuclease-Free Water

(Contd. of page 1)

2.3 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.

vPvB: Not applicable.

3: Composition/information on ingredients

3.1 Chemical characterization: Substances

CAS No. Description

7732-18-5 water

Identification number(s)

EC number: 231-791-2

4: First-aid measures

4.1 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.

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

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture None known

5.3 Advice for firefighters No special advice

Protective equipment: No special measures required.

6: Accidental release measures

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

6.2 Environmental precautions: Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

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

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 13 for disposal information.

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Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/02/2016

Trade name: Nuclease-Free Water

(Contd. of page 2)

7: Handling and storage

7.1 Precautions for safe handling No special measures required.

Information about protection against explosions and fires: The product is not flammable.

7.2 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.

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

8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace: Not required.

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

8.2 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.

Eye protection: Not required.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.

Change in condition

Melting point/Melting range:	0 °C (32 °F)
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto igniting: Not determined.

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

Explosion limits:

Lower: Not determined.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/02/2016

Trade name: Nuclease-Free Water

(Contd. of page 3)

Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1 g/cm ³ (8.345 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 at 20 °C (68 °F):	.0952 mPas
Kinematic:	Not determined.
Organic solvents:	0.0 %
Water:	100.0 %
9.2 Other information	No further relevant information available.

10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Based on available data, the classification criteria are not met.

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

Primary irritant effect:

on the skin: Based on available data, the classification criteria are not met.

on the eye: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 02/03/2016

Reviewed on 02/02/2016

Trade name: Nuclease-Free Water

(Contd. of page 4)

12: Ecological information

12.1 Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

12.2 Persistence and degradability Not available

12.3 Bioaccumulative potential Not known

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Generally not hazardous for water.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

13.1 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

14.1 UN-Number *Not hazardous for transportation*

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

14.2 UN proper shipping name *None*

DOT, ADR, IMDG, IATA *Void*

ADN

14.3 Transport hazard class(es) *None*

DOT, ADR, ADN, IMDG, IATA

Class *Void*

14.4 Packing group *None*

DOT, ADR, IMDG, IATA *Void*

14.5 Environmental hazards:

Marine pollutant: *No*

14.6 Special precautions for user *Not applicable.*

14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code *Not applicable.*

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UN "Model Regulation":

Void

15: Regulatory information

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

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

Proposition 65

Chemicals known to cause cancer:

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenicity categories

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

National regulations:

Water hazard class: Generally not hazardous for water.

15.2 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

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Abbreviations and acronyms:

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

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial 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.**

US