



03/29/2010

Kit components

Product code	Description
1632105 1632105EDU	ReadyPrep™ 2-D Starter Kit

Components:

9704000	ReadyPrep™ 2-D Starter Kit Nanopure Water
1632106	ReadyPrep™ 2-D Rehydration/Sample Buffer 2-D Starter Kit Rehydration/Sample Buffer
9704002	ReadyPrep 2-D Starter Kit 30% Glycerol Soln
1632108	ReadyPrep™ 2-D Equilibration Buffer II 2-D Starter Kit Equilibration Buffer II
9704005	ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g 2-D Starter Kit Iodoacetamide 2 X 0.5 g
1632111	ReadyPrep™ Overlay Agarose
1632110	ReadyPrep™ E. coli Protein Sample
1632107	ReadyPrep™ 2-D Starter Kit Equil. Buffer I 2D Equilibration Buffer I

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ 2-D Starter Kit Nanopure Water
- **Article number:** 9704000
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
phone:1-800-268-0213 Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description:**
7732-18-5 water
- **Identification number(s):**
- **EINECS Number:** 231-791-2
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for man and environment** not applicable

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** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing 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.

(Contd. on page 2)

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ 2-D Starter Kit Nanopure Water

(Contd. of page 1)

- **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.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	Fluid
Colour:	Colourless
Odour:	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.
- **Vapour pressure at 20°C:** 23 hPa

(Contd. on page 3)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ 2-D Starter Kit Nanopure Water

(Contd. of page 2)

· Density at 20°C:	1 g/cm ³
· Solubility in / Miscibility with Water:	Fully miscible
· pH-value at 20°C:	7
· Organic solvents:	0.0 %
· Water:	100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No 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 according 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.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation:** Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

CDN

(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ 2-D Starter Kit Nanopure Water

(Contd. of page 3)

14 Transport information

- **TDG (Transport dangerous goods):**
- **TDG class:** -

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

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

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).

- **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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:** Environmental Health and Safety.

- **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ 2-D Rehydration/Sample Buffer
- **Article number:** 1632106, 9704001
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
- phone:1-800-268-0213
- Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 57-13-6 EINECS: 200-315-5 RTECS: YR 6250000	urea		50-100%
CAS: 75621-03-3	3-[(cholamidopropyl)dimethylammonio]-propanesulfonate		2.5-5%
CAS: 27565-41-9 EINECS: 248-531-9 RTECS: XO 8576500	(R*,R*)-(±)-1,4-dimercaptobutane-2,3-diol	Xn; R 20/21/22	1.0-2.5%

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

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for 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 was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

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** Induce vomiting and call for medical help.

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep™ 2-D Rehydration/Sample Buffer

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing 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:** Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses

CDN

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep™ 2-D Rehydration/Sample Buffer

(Contd. of page 2)

9 Physical and chemical properties:

· General Information

Form: Solid.
Colour: Whitish
Odour: Characteristic

· Change in condition

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· Flash point: Not applicable

· Self igniting: Product is not selfigniting.

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

· Density: Not determined

· Solubility in / Miscibility with

Water: Fully miscible

· Solvent content:

Organic solvents: 0.0 %
Water: 0.2 %

Solids content: 99.8 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

57-13-6 urea

Oral	LD50	14500 mg/kg (rat)
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· Primary irritant effect:

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

· **on the eye:** No 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:

(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep™ 2-D Rehydration/Sample Buffer

(Contd. of page 3)

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.

12 Ecological information:

- **Additional 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** Hand over to hazardous waste disposers.

- **Uncleaned packagings:**

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

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

14 Transport information

- **TDG (Transport dangerous goods):**

- **TDG class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

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

- **ICAO/IATA Class:** -

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).

- **Safety phrases:**

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

- **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

(Contd. on page 5)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep™ 2-D Rehydration/Sample Buffer

(Contd. of page 4)

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.**16 Other information:**

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

· **Department issuing MSDS:** Environmental Health and Safety.

· **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep 2-D Starter Kit 30% Glycerol Soln
- **Article number:** 9704002
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
- phone:1-800-268-0213
- Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 56-81-5 EINECS: 200-289-5 RTECS: MA 8050000	glycerol	50-100%
CAS: 7732-18-5 EINECS: 231-791-2 RTECS: ZC 0110000	water	35-50%

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

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for 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 was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

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** Induce vomiting and call for medical help.

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep 2-D Starter Kit 30% Glycerol Soln

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **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.
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.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

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

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

56-81-5 glycerol

EL	10* 3** mg/m ³ *mist; **mist, resirable
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep 2-D Starter Kit 30% Glycerol Soln

(Contd. of page 2)

· **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	Fluid
Colour:	According to product specification
Odour:	Odourless

· **Change in condition**

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

· **Flash point:** > 100°C

· **Ignition temperature:** 400°C

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

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

· **Explosion limits:**

Lower: 0.9 Vol %

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 20°C:** 1.12999 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

Organic solvents:	55.7 %
Water:	44.3 %

10 Stability and reactivity

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

· **Materials to be avoided:**

· **Dangerous reactions** No dangerous reactions known

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

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

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

· **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep 2-D Starter Kit 30% Glycerol Soln

(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 according to our experience and the information provided to us.

12 Ecological information:

· **Additional 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** Hand over to hazardous waste disposers.

· **Uncleaned packagings:**

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

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

14 Transport information

· **TDG (Transport dangerous goods):**

· **TDG class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

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

· **ICAO/IATA Class:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

· **Markings 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 (GefStoffV).

· **Safety phrases:**

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

· **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

(Contd. on page 5)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 10/08/2009

Trade name: ReadyPrep 2-D Starter Kit 30% Glycerol Soln

(Contd. of page 4)

· **Technical instructions (air):**

Class	Share in %
NK	50-100

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

16 Other information:

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

· **Department issuing MSDS:** Environmental Health and Safety.

· **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ 2-D Equilibration Buffer II
- **Article number:** 1632108, 9704004
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
phone:1-800-268-0213 Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 57-13-6 EINECS: 200-315-5 RTECS: YR 6250000	urea		50-100%
CAS: 77-86-1 EINECS: 201-064-4 RTECS: TY 2900000	Tris(hydroxymethyl)aminomethane	Xn, Xi; R 22-36	5-10%
CAS: 151-21-3 EINECS: 205-788-1 RTECS: WT 1050000	sodium dodecyl sulphate	Xn, Xi; R 20/22-36/37/38-42	2.5-5%
CAS: 1185-53-1 EINECS: 214-684-5	Tris(hydroxymethyl)aminomethane hydrochloride		2.5-5%

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

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for 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 was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

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.

(Contd. on page 2)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Equilibration Buffer II

(Contd. of page 1)

- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing 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:** Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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.

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Equilibration Buffer II

(Contd. of page 2)

· **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form: Solid.
Colour: Whitish
Odour: Odourless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

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

· **Density:** Not determined

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

· **Solvent content:**
Organic solvents: 0.0 %

10 Stability and reactivity

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

· **Materials to be avoided:**

· **Dangerous reactions** No dangerous reactions known

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

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

57-13-6 urea

Oral	LD50	14500 mg/kg (rat)
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77-86-1 Tris(hydroxymethyl)aminomethane

Oral	LD50	5900 mg/kg (rat)
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151-21-3 sodium dodecyl sulphate

Oral	LD50	1288 mg/kg (rat)
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Dermal	LD50	580 mg/kg (rab)
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· **Primary irritant effect:**

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

· **on the eye:** No irritating effect.

(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Equilibration Buffer II

(Contd. of page 3)

- **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 according to our experience and the information provided to us.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **TDG (Transport dangerous goods):**
- **TDG class:** -

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

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

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).
- **Safety phrases:**
60 This material and its container must be disposed of as hazardous waste.

(Contd. on page 5)

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Equilibration Buffer II

(Contd. of page 4)

· National regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

· Water hazard 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: Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

CDN

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** *ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g*
- **Article number:** 9704005
- **Application of the substance / the preparation** *Laboratory chemicals*
- **Manufacturer/Supplier:**
*Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada*
phone:1-800-268-0213 *Fax: 1-888-913-9779*
- **Information department:** *Technical services, customer support.*
- **Emergency information:** *phone:1-800-268-0213*

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description:**
144-48-9 2-iodoacetamide
- **Identification number(s):**
- **EINECS Number:** *205-630-1*
- **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

3 Hazards identification

- **Hazard description:**
T Toxic
- **Information pertaining to particular dangers for man and environment**
R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

4 First aid measures

- **General information**
*Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.*
- **After inhalation**
*Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing** *Do not induce vomiting; call for medical help immediately.*

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 2)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g

(Contd. of page 1)

- **Protective equipment:**
Mount respiratory protective device.
Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **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

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **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.
Store protective clothing separately.
Avoid contact with the eyes and skin.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses

CDN

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g

(Contd. of page 2)

9 Physical and chemical properties:

· **General Information**

Form: Solid.
Colour: Whitish
Odour: Odourless

· **Change in condition**

Melting point/Melting range: 92-95°C
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Product is not flammable.

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

· **Density at 20°C:** 1 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible
Organic solvents: 0.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information:

- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g

(Contd. of page 3)

13 Disposal considerations

- **Product:**
- **Recommendation**
Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **TDG (Transport dangerous goods):**
- **TDG class:** 6.1 Toxic substances.
- **Danger code (Kemler):** 60
- **UN-Number:** 2811
- **Packaging group:** III
- **Label** 6.1
- **Description of goods:** 2811 TOXIC SOLID, ORGANIC, N.O.S. (2-iodoacetamide)
- **Tunnel restriction code** E
- **Maritime transport IMDG:**
- **Marine pollutant:** Yes
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 6.1
- **UN/ID Number:** 2811
- **Label** 6.1
- **Packaging group:** III
- **Proper shipping name:** TOXIC SOLID, ORGANIC, N.O.S. (2-iodoacetamide)

15 Regulations

- **Markings according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials
- **Code letter and hazard designation of product:**
T Toxic
- **Risk phrases:**
23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- **Safety phrases:**
37 Wear suitable gloves.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- **National regulations**
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

(Contd. on page 5)

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep 2-D Starter Kit Iodoacetamide, 0.5g

(Contd. of page 4)

· Technical instructions (air):

Class	Share in %
I	50-100

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:** Environmental Health and Safety.

· **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ Overlay Agarose
- **Article number:** 1632111, 9704006
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
- phone:1-800-268-0213
- Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description:**
7732-18-5 water
- **Identification number(s):**
- **EINECS Number:** 231-791-2
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

· **Chemical characterization**

· **Dangerous components:**

CAS: 56-40-6	glycine	Xn, Xi; R 22-36	1.0-2.5%
EINECS: 200-272-2			
RTECS: MB 7600000			

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for man and environment** not applicable

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** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 2)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ Overlay Agarose

(Contd. of page 1)

· **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.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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:** Safety glasses

9 Physical and chemical properties:

· General Information

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

(Contd. on page 3)

CDN

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ Overlay Agarose

(Contd. of page 2)

- | | |
|--|---|
| · Change in condition | |
| <i>Melting point/Melting range:</i> 0°C | |
| <i>Boiling point/Boiling range:</i> undetermined | |
| · Flash point: | Not applicable |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapour pressure at 20°C: | 23 hPa |
| · Density at 20°C: | 1 g/cm ³ |
| · Solubility in / Miscibility with Water: | Fully miscible |
| · pH-value at 20°C: | 8.3 |
| · Organic solvents: | 0.0 % |
| · Water: | 97.7 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No 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 according 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.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation** Hand over to hazardous waste disposers.

(Contd. on page 4)

CDN

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ Overlay Agarose

(Contd. of page 3)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **TDG (Transport dangerous goods):**

- **TDG class:** -

- **Maritime transport IMDG:**

- **IMDG Class:** -

- **Marine pollutant:** No

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

- **ICAO/IATA Class:** -

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).

- **Safety phrases:**

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

- **National regulations**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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:** Environmental Health and Safety.

- **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ E. coli Protein Sample
- **Article number:** 1632110, 9703999
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
- phone:1-800-268-0213
- Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 6138-23-4	d-trehalose		50-100%
	Protein Extract		2.5-5%
CAS: 1185-53-1 EINECS: 214-684-5	Tris(hydroxymethyl)aminomethane hydrochloride		2.5-5%
CAS: 77-86-1 EINECS: 201-064-4 RTECS: TY 2900000	Tris(hydroxymethyl)aminomethane	Xn, Xi; R 22-36	1.0-2.5%

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

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for 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 was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

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** Induce vomiting and call for medical help.

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ E. coli Protein Sample

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing 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:** Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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:** Safety glasses

CDN

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ E. coli Protein Sample

(Contd. of page 2)

9 Physical and chemical properties:

· **General Information**

Form: Solid.
Colour: Whitish
Odour: Odourless

· **Change in condition**

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

Organic solvents: 0.0 %

10 Stability and reactivity

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

· **Materials to be avoided:**

· **Dangerous reactions** No dangerous reactions known

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

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

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

· **on the eye:** No 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 according to our experience and the information provided to us.

CDN

(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ E. coli Protein Sample

(Contd. of page 3)

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation** Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **TDG (Transport dangerous goods):**
- **TDG class:** -

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

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

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).
- **Safety phrases:**
60 This material and its container must be disposed of as hazardous waste.
- **National regulations**
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations

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:** Environmental Health and Safety.
- **Contact:**
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

(Contd. on page 5)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 01/20/2010

Trade name: ReadyPrep™ E. coli Protein Sample

(Contd. of page 4)

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000
* **Data compared to the previous version altered.**

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

1 Identification of substance:

- **Product details:**
- **Trade name:** ReadyPrep™ 2-D Starter Kit Equil. Buffer I
- **Article number:** 1632107, 9704003
- **Application of the substance / the preparation** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories (Canada) Ltd.,
1329 Meyerside Drive,
Mississauga, Ontario
L5T 1C9
Canada
phone:1-800-268-0213 Fax: 1-888-913-9779
- **Information department:** Technical services, customer support.
- **Emergency information:** phone:1-800-268-0213

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 57-13-6 EINECS: 200-315-5 RTECS: YR 6250000	urea		50-100%
CAS: 77-86-1 EINECS: 201-064-4 RTECS: TY 2900000	Tris(hydroxymethyl)aminomethane	Xn, Xi; R 22-36	5-10%
CAS: 151-21-3 EINECS: 205-788-1 RTECS: WT 1050000	sodium dodecyl sulphate	Xn, Xi; R 20/22-36/37/38-42	2.5-5%
CAS: 27565-41-9 EINECS: 248-531-9 RTECS: XO 8576500	(R*,R*)-(±)-1,4-dimercaptobutane-2,3-diol	Xn; R 20/21/22	2.5-5%
CAS: 1185-53-1 EINECS: 214-684-5	Tris(hydroxymethyl)aminomethane hydrochloride		2.5-5%

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

3 Hazards identification

- **Hazard description:** not applicable
- **Information pertaining to particular dangers for 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 was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Starter Kit Equil. Buffer I

(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** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing 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:** Pick up mechanically.
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **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.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to when handling chemicals.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves

(Contd. on page 3)

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Starter Kit Equil. Buffer I

(Contd. of page 2)

- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	Solid.
Colour:	Whitish
Odour:	Characteristic

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

Organic solvents: 0.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

57-13-6 urea

Oral	LD50	14500 mg/kg (rat)
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77-86-1 Tris(hydroxymethyl)aminomethane

Oral	LD50	5900 mg/kg (rat)
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151-21-3 sodium dodecyl sulphate

Oral	LD50	1288 mg/kg (rat)
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Dermal	LD50	580 mg/kg (rab)
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(Contd. on page 4)

Safety Data Sheet

According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Starter Kit Equil. Buffer I

(Contd. of page 3)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No 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 according to our experience and the information provided to us.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
 Hand over to hazardous waste disposers.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **TDG (Transport dangerous goods):**
- **TDG class:** -

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

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

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulations

- **Markings 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 (GefStoffV).

(Contd. on page 5)

CDN

Safety Data Sheet
According to 91/155 EEC

Printing date 03/29/2010

Revision: 03/10/2010

Trade name: ReadyPrep™ 2-D Starter Kit Equil. Buffer I

(Contd. of page 4)

· Safety phrases:*60 This material and its container must be disposed of as hazardous waste.***· National regulations***This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations***· Water hazard 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:** *Environmental Health and Safety.***· Contact:***Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000**Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000*