BioinGentech Ltd.
Genetic Engineering

MSDS Bioingentech Genomic DNA Purification Kit

Bioingentech Ltd.
Salas 350, Piso 2, Concepción
Chile.
(056) 41-2790435

Kit components

Product Bioingentech®
Genomic DNA Purification Kit

Substance Number	Description	Symbols
A793	Cell Lysis Solution	-
A794	Nuclei Lysis Solution	-
A795	Proteinase K	-
A796	RNase A Solution	-
A797	Protein Precipitation Solution	Xi
A798	DNA Rehydration Solution	-

Material Safety Data Sheet

1 Identification of substance

Trade name: Cell Lysis Solution
Article number: A793
Application of the substance / the preparation Laboratory chemicals
Manufacturer/Supplier:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435
Emergency Information:
www.bioingentech.com - info@bioingentech.com
2

2 Composition/Data on components

Chemical characterization
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous components: Void
Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

Hazard description: Not applicable. Product has been classified as non-hazardous.
Information pertaining to particular dangers for man and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.
Classification system:
The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.
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

4 First aid measures

General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Protective equipment: No special measures required.

Trade name: Cell Lysis Solution

6 Accidental release measures

Person-related safety precautions: Not required.
Measures for environmental protection: No special measures required.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information: No dangerous substances are released.
2

7 Handling and storage

Handling:
Information for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

8 Exposure controls and personal protection

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 for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

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

Material Safety Data Sheet

Trade name: Cell Lysis Solution

9 Physical and chemical properties

General Information

Form: **Color:** **Odor:**	Fluid Colorless Characteristic
Change in condition **Melting point/Melting range:** **Boiling point/Boiling range:**	 0°C (32°F) 100°C (212°F)
Flash point:	Not applicable.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	1 g/cm³
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
pH-value at 20°C (68°F):	8.0
Solvent content: **Organic solvents:** **Water:**	 0.0 % 99.2 %
Solids content:	1.0 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Dangerous reactions No dangerous reactions known.
Dangerous 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: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for **preparations:**When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Material Safety Data Sheet

Trade name: Cell Lysis Solution

12 Ecological information

General notes:
Generally not hazardous for water
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pHvalue harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

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

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

Sara

Section 355 (extremely hazardous substances): None of the ingredients are listed.
Section 313 (Specific toxic chemical listings): None of the ingredients are listed.

Trade name: Cell Lysis Solution

15 Regulations (continue)

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.

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed.
MAK (German Maximum Workplace Concentration) None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.

Product related hazard informations:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.

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

Material Safety Data Sheet

Trade name: Cell Lysis Solution

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:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435

Material Safety Data Sheet

1 Identification of substance

Trade name: Nuclei Lysis Solution
Article number: A794
Application of the substance / the preparation Laboratory chemicals
Manufacturer/Supplier:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435
Emergency Information:
www.bioingentech.com - info@bioingentech.com
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2 Composition/Data on components

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

Dangerous components:

1185-53-1	Tris(hydroxymethyl)aminomethane hydrochloride	<2.00%
77-86-1	2-Amino-2-(hydroxymethyl)-1,3-propanediol	<2.00%

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

3 Hazards identification

Hazard description: Not applicable. Product has been classified as non-hazardous.
Information pertaining to particular dangers for man and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.
Classification system:
The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.
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

4 First aid measures

General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO_2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Protective equipment: No special measures required.

Material Safety Data Sheet

Trade name: Nuclei Lysis Solution

6 Accidental release measures

Person-related safety precautions: Not required.
Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information: No dangerous substances are released.
2

7 Handling and storage

Handling:
Information for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

8 Exposure controls and personal protection

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 for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

General Information

Form: **Color:** **Odor:**	Fluid Colorless Characteristic
Change in condition **Melting point/Melting range:** **Boiling point/Boiling range:**	 0°C (32°F) 100°C (212°F)
Flash point:	Not applicable.
Auto igniting:	Product is not selfigniting.

Material Safety Data Sheet

Trade name: Nuclei Lysis Solution

9 Physical and chemical properties (continue)

Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	1 g/cm³
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
pH-value at 20°C (68°F):	9.0
Solvent content: **Organic solvents:** **Water:**	 0.0 % 96.4 %
Solids content:	2.0 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Dangerous reactions No dangerous reactions known.
Dangerous 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: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for **preparations:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pHvalue harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

Product:
Recommendation:
Smaller quantities can be disposed of with household waste.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Material Safety Data Sheet

Trade name: Nuclei Lysis Solution

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

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.

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.

Material Safety Data Sheet

Trade name: Proteinase K

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.
2

7 Handling and storage

Handling:
Information for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

8 Exposure controls and personal protection

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 for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

General Information

Form: **Color:** **Odor:**	Fluid Colorless Characteristic
Change in condition **Melting point/Melting range:** **Boiling point/Boiling range:**	 Undetermined Undetermined
Flash point:	Not applicable.
Danger of explosion:	Products does not present an explosion hazard.

Material Safety Data Sheet

Trade name: Proteinase K

9 Physical and chemical properties (continue)

Density:	Not determined
Solubility in / Miscibility with Water:	Fully miscible.

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Dangerous reactions: Reacts with acids, alkalis and oxidizing agents.
Dangerous products of decomposition: No dangerous decomposition products known.

11 Toxicological information

Acute toxicity:
Primary irritant effect:
on the skin: Irritant to skin and mucous membranes.
on the eye: Irritating effect.
Sensitization:
Sensitization possible through inhalation.
Sensitization possible through skin contact.

12 Ecological information

General notes: Generally not hazardous for water.

13 Disposal considerations

Product:
Recommendation:
Smaller quantities can be disposed of with household waste.
Must not be disposed 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.

Material Safety Data Sheet

Trade name: Proteinase K

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

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.

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.

Material Safety Data Sheet

Trade name: Proteinase K

15 Regulations (continue)

TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed.
MAK (German Maximum Workplace Concentration) None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.

Product related hazard informations:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.
Hazard symbols:
Harmful
Risk phrases:
Irritating to eyes, respiratory system and skin.
May cause sensitization by inhalation and skin contact.
Safety phrases:
Do not breathe gas/fumes/vapour/spray
Avoid contact with skin.
In case of contact with eyes, rinse inmediately with plenty of water and seek medical advice.
Wear suitables protective clothing and gloves.
National 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:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435

Material Safety Data Sheet

1 Identification of substance

Trade name: RNase A Solution
Article number: A796
Application of the substance / the preparation Laboratory chemicals
Manufacturer/Supplier:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435
Emergency Information:
www.bioingentech.com - info@bioingentech.com
2

2 Composition/Data on components

Chemical characterization
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous components: Void
Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

Hazard description: Not applicable. Product has been classified as non-hazardous.
Information pertaining to particular dangers for man and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.
Classification system:
The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.
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

4 First aid measures

General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Protective equipment: No special measures required.

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Material Safety Data Sheet

Trade name: RNase A Solution

9 Physical and chemical properties (continue)

Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	1 g/cm³
Solubility in / Miscibility with Water:	Fully miscible.
pH-value at 20°C (68°F):	–
Solvent content: **Organic solvents:** **Water:**	 0.0 % 98.6 %
Solids content:	0.2 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. 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: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

General notes:
Generally not hazardous for water
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values.
A low pHvalue harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

Product:
Recommendation:
Smaller quantities can be disposed of with household waste.
Must not be disposed 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.

Material Safety Data Sheet

Trade name: RNase A Solution

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

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.

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.

Material Safety Data Sheet

Trade name: RNase A Solution

15 Regulations (continue)

TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed.
MAK (German Maximum Workplace Concentration) None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.

Product related hazard informations:
Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations according to directives on hazardous materials.

National 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:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435

Material Safety Data Sheet

1 Identification of substance

Trade name: Protein Precipitation Solution
Article number: A797
Application of the substance / the preparation Laboratory chemicals
Manufacturer/Supplier:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435
Emergency Information:
www.bioingentech.com - info@bioingentech.com

2 Composition/Data on components

Chemical characterization
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous components:
631-61-8 ammonium acetate 50-75%
Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

Hazard description:

Xi Irritant

Information pertaining to particular dangers for man and environment: Irritating to eyes.
Classification system:
The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.
NFPA ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 1
Fire = 0
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Irritant
Primary route(s) of entry:
Dermal
Oral
Target Organ(s): Not applicable or unknown

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.
If symptoms persist, consult a doctor.
After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO_2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Material Safety Data Sheet

Trade name: Protein Precipitation Solution

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).
Ensure adequate ventilation.
2

7 Handling and storage

Handling:
Information for safe handling:
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
No special precautions are necessary if used correctly.
Information about protection against explosions and fires: No special measures required.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep receptacle tightly sealed.

8 Exposure controls and personal protection

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:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Protection of hands:
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Tightly sealed goggles

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Material Safety Data Sheet

Trade name: Protein Precipitation Solution

13 Disposal considerations

Product:
Recommendation:
Smaller quantities can be disposed of with household waste.
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.

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

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.

Material Safety Data Sheet

Trade name: Protein Precipitation Solution

15 Regulations (continue)

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH) None of the ingredients are listed.
MAK (German Maximum Workplace Concentration) None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients are listed.

Product related hazard informations:
The product has been classified and marked in accordance with directives on hazardous materials.
Hazard symbols:
Xi Irritant
Risk phrases:
Irritating to eyes.
Safety phrases:
Keep out of the reach of children.
Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
Avoid contact with eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed, seek medical advice immediately and show this container or label.
Dispose of this material and its container to hazardous or special waste collection point.
National regulations:
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:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435

Material Safety Data Sheet

1 Identification of substance

Trade name: DNA Rehydration Solution
Article number: A798
Application of the substance / the preparation Laboratory chemicals
Manufacturer/Supplier:
Bioingentech Ltd.
Salas 350, piso 2, Concepción
Chile.
(056) 41-2790435
Emergency Information:
www.bioingentech.com - info@bioingentech.com
2

2 Composition/Data on components

Chemical characterization
Description: Mixture of the substances listed below with nonhazardous additions.
Dangerous components: Void
Additional information: For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

Hazard description: Not applicable. Product has been classified as non-hazardous.
Information pertaining to particular dangers for man and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.
Classification system:
The classification was made according to the latest editions of international substances lists, and is expanded upon by company and technical literature data.
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

4 First aid measures

General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Protective equipment: No special measures required.

Material Safety Data Sheet

Trade name: DNA Rehydration Solution

6 Accidental release measures

Person-related safety precautions: Not required.
Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Additional information: No dangerous substances are released.
2

7 Handling and storage

Handling:
Information for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.

Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.

8 Exposure controls and personal protection

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 for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands:
Protective gloves
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Goggles recommended during refilling.

9 Physical and jXdXdjTproperties

General Information

Form:
Color:
Odor:

Change in condition
Melting point/Melting range:
BoiGsiftRfRfjTpoint/wll1/0MaterialG9fR9f6°wfB0Col:-29f0 Rw°9fR9fAuforfkworing at2RfRfRfw°f9f61wGk9°xfwx

Material Safety Data Sheet

Trade name: DNA Rehydration Solution

9 Physical and chemical properties (continue)

Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C (68°F):	1 g/cm³
Solubility in / Miscibility with Water:	Fully miscible.
pH-value at 20°C (68°F):	8.0
Solvent content: **Organic solvents:** **Water:**	 0.0 % 99.7 %
Solids content:	0.4 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. 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: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to internally approved calculation methods for preparations:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

General notes:
Generally not hazardous for water
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pHvalue harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

Product:
Recommendation:
Smaller quantities can be disposed of with household waste.
Must not be disposed 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.

Material Safety Data Sheet

Trade name: DNA Rehydration Solution

14 Transport information

Contact Bioingentech for additional transportation information

RID/ADR **Non-hazardous for road transport.**
IMDG **Non-hazardous for sea transport.**
IATA **Non-hazardous for air transport.**

15 Regulations

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.

Cancerogenity categories

EPA (Environmental Protection Agency) None of the ingredients are listed.
IARC (International Agency for Research on Cancer) None of the ingredients are listed.
NTP (National Toxicology Program) None of the ingredients are listed.