

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product name: Primer, Probes and Internal Control Universal Mix

Kit Name: Brachyspira pilosicoli

Manufacturer/Supplier: Bioingentech Ltd.

Company/undertaking identification

Address: Bernardo O'Higgins 1213. Concepción, Chile.

Phone: (56)-41-2790435

SECTION 2: Hazards identification

GHS - Classification	I	Principle F	Routes of Exposure	Specific effects		HMIS	
Signal Word	None	Potential Health Effects		Carcinogenic effects	None.	Health	0
Health hazards	Not classified	eyes:	May cause eye irritation with susceptible persons.	Mutagenic effects	None.	Flammability	0
Physical hazards	Not classified	Skin:	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.	Reactivity	0
Hazard Statements	Not Applicable	Inhalation:	May be harmful by inhalation.	Sensitization	None.		
Precautionary	Not Applicable	Ingestion:	May be harmful if swallowed.	Target Organ Effects	None under normal		
Statements					use conditions.		

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Glycerol 56-81-5 (10-30)	56-81-5	200-289-5	1 0-30

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Skin contact	Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Most important symptoms and effects, both acute and delayed Not Applicable

Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Specific hazards arising from the chemical	Not known

SECTION 6: Accidental release measures

Personal precautions	Use personal protection equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for more information.

SECTION 7: Handling and storage

HandlingAlways wear reccommended Personal Protective Equipment. No special handling advices are necessary.StorageKeep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation, wear suitable	Skin and Body Protection	Lightweight protective clothing.
	respiratory equipment.	Hygiene measures	Handle in accordance with good industrial
Hand protection	Impervious gloves.		hygiene and safety practice.
Eye protection	Wear safety glasses with side shields (or goggles)		
F 1			

Environmental exposure controls No special environmental precautions required.

SECTION 9: Physical and chemical properties

General information	n			
Form	Liquid	Boiling point / boiling range	°C >100	°F >212
Appearance	No information available	Melting point / melting range	°C >0	°F >32
Odor	No data available	flash point	°C >90	°F >160
Odor Threshold	No data available	Autoignition Temperature	°C No data available	°F No data available

Evaporation rate	No data available	Partition coefficient	No data available
Flammability (solid, gas)	No data available	n-octanol/water	
Oxidizing properties	No information available	Vapor Pressure	No data available
Water solubility soluble	soluble	vapor density	No data available
Upper explosion limit	No data available	Viscosity	No data available
Lower explosion limit	No data available	pH value	6-8

Stability	Stable under normal conditions.	Hazardous decomposition	Carbon oxides.
Materials to avoid	Strong acids and oxidizing agents.	products	
	Acetic anhydride. Isocyanates. Ammonia. Bases.	polymerization	Hazardous polymerization does not occur.
Possibility of hazardous reactions	Hazardous reaction has not been reported	Conditions to avoid	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Ingestion

Chemical Name	LD50 (oral,rat/mouse)	LD50	(dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Glycerol	= 12600 mg/kg Oral	No dat	a available	>570mg/m ³ (Rat)
Principle Routes of Exposure Potential Health Effects				
eyes	May cause eye irritation with susceptible persons.		Mutagenic effects	None.
Skin	May cause skin irritation in susceptible persons.		Reproductive toxicity	None.
Inhalation	May be harmful by inhalation.		Sensitization	None.

Target Organ Effects

Clean Air Act, Section 112 Hazardous

Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

None under normal use conditions

Carcinogenic effects	None.
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May be harmful if swallowed.

SECTION 12: Ecological information Ecotoxicity Contains no substances known to be hazardous Chronic aquatic toxicity Not classified chronic. to the environment or not degradable in waste Mobility Log Pow. water treatment plants. Biodegradation Inherently biodegradable. Bioaccumulation Acute aquatic toxicity Not classified for acute. Material does not bioaccumulate. Chemical Name ater Fish Species Data ator Algan Data Water Elea Dat licrotox Data

Chemical Name	i lesilwaler Aigae Dala	Water Tiea Data	r resilwater r isir opecies Data	WICIOLOX Data	log Fow	
Glycerol		Daphnia magna EC50>500 mg/L (24h)			logPow-1.76	

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No danger	ous good in sense of these transport regulations	Packing group	None
Hazard Class	None		UN-No	None
Subsidiary class	None		Environmental hazards	None

SECTION 15: Regulatory information

Component	US TSCA	US Federal Regulations
Glycerol 56-81-5 (10-30)	Listed	SARA 313 This product is not regulated by SARA.
		This product is not regulated by SAIVA.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revision

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

SDS sections updated.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"



SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product name: Universal qPCR Master Mix Kit Name: Brachyspira pilosicoli

Company/undertaking identification

Manufacturer/Supplier: Bioingentech Ltd. Address: Bernardo O'Higgins 1213. Concepción, Chile.

Phone: (56)-41-2790435

SECTION 2: Hazards identification

GHS - Classification	1	Principle F	Routes of Exposure	Specific effects		HMIS	
Signal Word	None	Potential I	Health Effects	Carcinogenic effects	None.	Health	0
Health hazards	Not classified	eyes:	May cause eye irritation with susceptible persons.	Mutagenic effects	None.	Flammability	0
Physical hazards	Not classified	Skin:	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.	Reactivity	0
Hazard Statements	Not Applicable	Inhalation:	May be harmful by inhalation.	Sensitization	None.		
Precautionary	Not Applicable	Ingestion:	May be harmful if swallowed.	Target Organ Effects	None under normal		
Statements			-		use conditions.		

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Glycerol 56-81-5 (10-30)	56-81-5	200-289-5	1 0-30

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Skin contact	Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Most important symptoms and effects, both acute and delayed Not Applicable

Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Specific hazards arising from the chemical	Not known

SECTION 6: Accidental release measures

Personal precautionsUse personal protection equipment.Methods for cleaning upSoak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for more information.

SECTION 7: Handling and storage

Handling Storage Always wear reccommended Personal Protective Equipment. No special handling advices are necessary. Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation, wear suitable	Skin and Body Protection	Lightweight protective clothing.
	respiratory equipment.	Hygiene measures	Handle in accordance with good industrial
Hand protection	Impervious gloves.		hygiene and safety practice.
Eye protection	Wear safety glasses with side shields (or goggles).		

Environmental exposure controls No special environmental precautions required.

SECTION 9: Physical and chemical properties

General information		
Form Liquid Boiling point / boiling range	°C >100	°F >212
Appearance No information available Melting point / melting range	°C >0	°F >32
Odor No data available flash point	°C >90	°F >160
Odor Threshold No data available Autoignition Temperature	°C No data available	°F No data available

Evaporation rate	No data available	Partition coefficient	No data available
Flammability (solid, gas)	No data available	n-octanol/water	
Oxidizing properties	No information available	Vapor Pressure	No data available
Water solubility soluble	soluble	vapor density	No data available
Upper explosion limit	No data available	Viscosity	No data available
Lower explosion limit	No data available	pH value	6-8

Stability	Stable under normal conditions.	Hazardous decomposition	Carbon oxides.
Materials to avoid	Strong acids and oxidizing agents.	products	
	Acetic anhydride. Isocyanates. Ammonia. Bases.	polymerization	Hazardous polymerization does not occur.
Possibility of hazardous reactions	Hazardous reaction has not been reported	Conditions to avoid	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)		
Glycerol	= 12600 mg/kg Oral	No data available	>570mg/m³ (Rat)		
Principle Routes of Exposure Potential Health Effects					
eyes	May cause eye irritation with suscer	otible persons. Mutagenic effects	None.		

6	yes	may cause eye initation with susceptible persons.	mulayerine errects	NUIIC.
S	ikin	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.
lı	nhalation	May be harmful by inhalation.	Sensitization	None.
h	ngestion	May be harmful if swallowed.	Target Organ Effects	None under normal use conditions
C	Carcinogenic effects	None.		

SECTION 12: Ecological information

Ecotoxicity Acute aquatic toxicity				Not classified chro Log Pow. Inherently biodegra Material does not b	adable.
Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow

Glycerol	Daphnia magna EC50>500 mg/L (24h)		logPow-1.76
	EC30>300 Mg/E (24N)		

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No danger	ous good in sense of these transport regulations	Packing group	None	
Hazard Class	None		UN-No	None	
Subsidiary class	None		Environmental hazards	None	

SECTION 15: Regulatory information

Component	US TSCA	US Federal Regulations
Glycerol 56-81-5 (10-30)	Listed	SARA 313 This product is not regulated by SARA.
		This product is not regulated by origin.

SDS sections updated.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Clean Air Act, Section 112 Hazardous

Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

SECTION 16: Other information

Reason for revision

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product name: B. pilosicoli Positive Control Kit Name: Brachyspira pilosicoli

Company/undertaking identification

Manufacturer/Supplier: Bioingentech Ltd. Address: Bernardo O'Higgins 1213. Concepción, Chile.

Phone: (56)-41-2790435

SECTION 2: Hazards identification

GHS - Classification	1	Principle F	Routes of Exposure	Specific effects		HMIS	
Signal Word	None	Potential I	Health Effects	Carcinogenic effects	None.	Health	0
Health hazards	Not classified	eyes:	May cause eye irritation with susceptible persons.	Mutagenic effects	None.	Flammability	0
Physical hazards	Not classified	Skin:	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.	Reactivity	0
Hazard Statements	Not Applicable	Inhalation:	May be harmful by inhalation.	Sensitization	None.		
Precautionary	Not Applicable	Ingestion:	May be harmful if swallowed.	Target Organ Effects	None under normal		
Statements					use conditions.		

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Glycerol 56-81-5 (10-30)	56-81-5	200-289-5	1 0-30

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Skin contact	Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Most important symptoms and effects, both acute and delayed Not Applicable

Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Specific hazards arising from the chemical	Not known

SECTION 6: Accidental release measures

Personal precautionsUse personal protection equipment.Methods for cleaning upSoak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for more information.

SECTION 7: Handling and storage

Handling Storage Always wear reccommended Personal Protective Equipment. No special handling advices are necessary. Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation, wear suitable	Skin and Body Protection	Lightweight protective clothing.
	respiratory equipment.	Hygiene measures	Handle in accordance with good industrial
Hand protection	Impervious gloves.		hygiene and safety practice.
Eye protection	Wear safety glasses with side shields (or goggles).		

Environmental exposure controls No special environmental precautions required.

SECTION 9: Physical and chemical properties

General information				
Form	Liquid	Boiling point / boiling range	°C >100	°F >212
Appearance	No information available	Melting point / melting range	°C >0	°F >32
Odor	No data available	flash point	°C >90	°F >160
Odor Threshold	No data available	Autoignition Temperature	°C No data available	°F No data available

Evaporation rate	No data available	Partition coefficient	No data available
Flammability (solid, gas)	No data available	n-octanol/water	
Oxidizing properties	No information available	Vapor Pressure	No data available
Water solubility soluble	soluble	vapor density	No data available
Upper explosion limit	No data available	Viscosity	No data available
Lower explosion limit	No data available	pH value	6-8

Stability	Stable under normal conditions.	Hazardous decomposition	Carbon oxides.
Materials to avoid	Strong acids and oxidizing agents.	products	
	Acetic anhydride. Isocyanates. Ammonia. Bases.	polymerization	Hazardous polymerization does not occur.
Possibility of hazardous reactions	Hazardous reaction has not been reported	Conditions to avoid	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)	
Glycerol	= 12600 mg/kg Oral	No data available	>570mg/m ³ (Rat)	
Principle Routes of Exposure Potential Health Effects				
eves	May cause eve irritation with suscer	otible persons. Mutagenic effects	None.	

eyes	way cause eye initation with susceptible persons.	mutagenic enects	NOTE.
Skin	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.
Inhalation	May be harmful by inhalation.	Sensitization	None.
Ingestion	May be harmful if swallowed.	Target Organ Effects	None under normal use conditions
Carcinogenic effects	None.		

SECTION 12: Ecological information

Ecotoxicity		stances known to be hazard nt or not degradable in was		Not classified chro Log Pow.	nic.
Acute aquatic toxicity	water treatment p Not classified for		Biodegradation Bioaccumulation	Inherently biodegra Material does not b	
Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow

Glycerol Daphnia magna logPow-1.76		•	•	
EC50>500 mg/L (24h)	Glycerol	Daphnia magna EC50>500 mg/L (24	h)	logPow-1.76

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No danger	ous good in sense of these transport regulations	Packing group	None
Hazard Class	None		UN-No	None
Subsidiary class	None		Environmental hazards	None

SECTION 15: Regulatory information

Component	US TSCA	US Federal Regulations
Glycerol 56-81-5 (10-30)	Listed	SARA 313 This product is not regulated by SARA.

SDS sections updated.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Clean Air Act, Section 112 Hazardous

Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

SECTION 16: Other information

Reason for revision

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product name:B. pilosicoli Negative ControlKit Name:Brachyspira pilosicoli

Manufacturer/Supplier: Bioingentech Ltd.

Company/undertaking identification

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Phone: (56)-41-2790435

SECTION 2: Hazards identification

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Physical hazards	Not classified	Skin:	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.	Reactivity	0
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Precautionary	Not Applicable	Ingestion:	May be harmful if swallowed.	Target Organ Effects	None under normal		
Statements					use conditions.		

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %	
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inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Most important symptoms and effects, both acute and delayed Not Applicable

Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Specific hazards arising from the chemical	Not known

SECTION 6: Accidental release measures

Personal precautions	Use personal protection equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for more information.

SECTION 7: Handling and storage

HandlingAlways wear reccommended Personal Protective Equipment. No special handling advices are necessary.StorageKeep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation, wear suitable	Skin and Body Protection	Lightweight protective clothing.
	respiratory equipment.	Hygiene measures	Handle in accordance with good industrial
Hand protection	Impervious gloves.		hygiene and safety practice.
Eye protection	Wear safety glasses with side shields (or goggles)		

Environmental exposure controls No special environmental precautions required.

SECTION 9: Physical and chemical properties

General information	on			
Form	Liquid	Boiling point / boiling range	°C >100	°F >212
Appearance	No information available	Melting point / melting range	°C >0	°F >32
Odor	No data available	flash point	°C >90	°F >160
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Evaporation rate	No data available	Partition coefficient	No data available
Flammability (solid, gas)	No data available	n-octanol/water	
Oxidizing properties	No information available	Vapor Pressure	No data available
Water solubility soluble	soluble	vapor density	No data available
Upper explosion limit	No data available	Viscosity	No data available
Lower explosion limit	No data available	pH value	6-8

Stability	Stable under normal conditions.	Hazardous decomposition	Carbon oxides.
Materials to avoid	Strong acids and oxidizing agents.	products	
	Acetic anhydride. Isocyanates. Ammonia. Bases.	polymerization	Hazardous polymerization does not occur.
Possibility of hazardous reactions	Hazardous reaction has not been reported	Conditions to avoid	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Carcinogenic effects

Chemical Name	LD50 (oral,rat/mouse) LD50		(dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Glycerol	= 12600 mg/kg Oral	No dat	a available	>570mg/m ³ (Rat)
Principle Routes of Ex	oosure Potential Health Effects			
eyes	May cause eye irritation with suscept	tible persons.	Mutagenic effects	None.
Skin	May cause skin irritation in susceptible persons.		Reproductive toxicity	None.
Inhalation	May be harmful by inhalation.		Sensitization	None.
Ingestion	May be harmful if swallowed.		Target Organ Effects	None under normal use conditions

SECTION 12: Ecological information

None.

	Ecotoxicity Acute aquatic toxicity
Chemical Name Freshwater Algae Data Water Flea Data Freshwater Fish Species Data Microtox Data log Pow	Chemical Name

Glycerol	Daphnia magna EC50>500 mg/L (24h)		logPow-1.76
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SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No dangerous good	in sense of these transport regulations	Packing group	None
Hazard Class	None		UN-No	None
Subsidiary class	None		Environmental hazards	None

SECTION 15: Regulatory information

Glycerol 56-81-5 (10-30)	Component	US TSCA	US Federal Regulations
This product is not regulated by S	Glycerol 56-81-5 (10-30)	Listed	SARA 313 This product is not regulated by SARA.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Clean Air Act, Section 112 Hazardous

Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

SECTION 16: Other information

Reason for revision

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SDS sections updated.

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product name: PCR grade Water

Kit Name: Brachyspira pilosicoli

Company/undertaking identification Manufacturer/Supplier: Bioingentech Ltd.

Address: Bernardo O'Higgins 1213. Concepción, Chile.

Phone: (56)-41-2790435

SECTION 2: Hazards identification

GHS - Classification		Principle Routes of Exposure		Specific effects		HMIS	
Signal Word	None	Potential I	Health Effects	Carcinogenic effects	None.	Health	0
Health hazards	Not classified	eyes:	May cause eye irritation with susceptible persons.	Mutagenic effects	None.	Flammability	0
Physical hazards	Not classified	Skin:	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.	Reactivity	0
Hazard Statements	Not Applicable	Inhalation:	May be harmful by inhalation.	Sensitization	None.		
Precautionary	Not Applicable	Ingestion:	May be harmful if swallowed.	Target Organ Effects	None under normal		
Statements					use conditions.		

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Glycerol 56-81-5 (10-30)	56-81-5	200-289-5	1 0-30

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Skin contact	Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
· · · · · · · ·	

Most important symptoms and effects, both acute and delayed Not Applicable

Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Specific hazards arising from the chemical	Not known

SECTION 6: Accidental release measures

Personal precautionsUse personal protection equipment.Methods for cleaning upSoak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. See Section 12 for more information.

SECTION 7: Handling and storage

Handling Storage Always wear reccommended Personal Protective Equipment. No special handling advices are necessary. Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Glycerol	15 mg/m ³ 5 mg/m ³	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation, wear suitable	Skin and Body Protection	Lightweight protective clothing.
	respiratory equipment.	Hygiene measures	Handle in accordance with good industrial
Hand protection	Impervious gloves.		hygiene and safety practice.
Eye protection	Wear safety glasses with side shields (or goggles).		

Environmental exposure controls No special environmental precautions required.

SECTION 9: Physical and chemical properties

General informatior	1			
Form	Liquid	Boiling point / boiling range	°C >100	°F >212
Appearance	No information available	Melting point / melting range	°C >0	°F >32
Odor	No data available	flash point	°C >90	°F >160
Odor Threshold	No data available	Autoignition Temperature	°C No data available	°F No data available

Evaporation rate	No data available	Partition coefficient	No data available
Flammability (solid, gas)	No data available	n-octanol/water	
Oxidizing properties	No information available	Vapor Pressure	No data available
Water solubility soluble	soluble	vapor density	No data available
Upper explosion limit	No data available	Viscosity	No data available
Lower explosion limit	No data available	pH value	6-8
-			

Stability	Stable under normal conditions.	Hazardous decomposition	Carbon oxides.
Materials to avoid	Strong acids and oxidizing agents.	products	
	Acetic anhydride. Isocyanates. Ammonia. Bases.	polymerization	Hazardous polymerization does not occur.
Possibility of hazardous reactions	Hazardous reaction has not been reported	Conditions to avoid	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)			
Glycerol	= 12600 mg/kg Oral	No data available	>570mg/m ³ (Rat)			
Principle Routes of Exposure Potential Health Effects						
eves May cause eve irritation with suscentible persons Mutagenic effects None						

eyes	May cause eye initation with susceptible persons.	mutagenic effects	None.
Skin	May cause skin irritation in susceptible persons.	Reproductive toxicity	None.
Inhalation	May be harmful by inhalation.	Sensitization	None.
Ingestion	May be harmful if swallowed.	Target Organ Effects	None under normal use conditions
Carcinogenic effects	None.		

SECTION 12: Ecological information

Ecotoxicity Acute aquatic toxicity		1		Not classified chro Log Pow. Inherently biodegr Material does not	adable.
Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow

Glycerol	Daphnia magna EC50>500 mg/L (24h)		logPow-1.76
	2000, 000 mg/2 (2 m)		

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No danger	ous good in sense of these transport regulation	s Packing group	None
Hazard Class	None		UN-No	None
Subsidiary class	None		Environmental hazards	None

SECTION 15: Regulatory information

Component	US TSCA	US Federal Regulations
Glycerol 56-81-5 (10-30)	Listed	SARA 313 This product is not regulated by SA
		This product is not regulated by SANA.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Clean Air Act, Section 112 Hazardous

Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

SECTION 16: Other information

Reason for revision

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

SDS sections updated.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"