

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

<b>Trade name or designation of the mixture</b>	Dilution Buffer
<b>Registration number</b>	-
<b>Synonyms</b>	None.
<b>Product code</b>	851 ACTICHROME® PLG
<b>Issue date</b>	01-December-2017
<b>Version number</b>	02
<b>Revision date</b>	20-July-2017
<b>Supersedes date</b>	07-June-2015

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

<b>Identified uses</b>	Research use only.
<b>Uses advised against</b>	Use in accordance with supplier's recommendations.

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

**Corporate Headquarters** BioMedica Diagnostics Inc.  
94 Wentworth Road, PO Box 1030  
Windsor, Nova Scotia CANADA B0N 2T0

**Contact person** Corporate Phone: 1-902-798-5105  
Corporate Fax: 1-902-798-1025  
Email: info@biomedicadiagnostics.com  
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**1.4. Emergency telephone number** US, Canada, Puerto Rico & Virgin Islands 1-800-255-3924  
International +1-813-248-0585  
Australia 1-300-954-583  
Brazil 0-800-591-6042  
China 400-120-0751  
India 000-800-100-4086  
Mexico 01-800-099-0731

**Contract number** MIS9591327

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Regulation (EC) No 1272/2008 as amended**

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

**Hazard summary** Avoid contact with eyes and skin. Do not ingest or inhale.

**2.2. Label elements****Label according to Regulation (EC) No. 1272/2008 as amended**

<b>Hazard pictograms</b>	None.
<b>Signal word</b>	None.
<b>Hazard statements</b>	None.

**Precautionary statements**

<b>Prevention</b>	Observe good laboratory hygiene practices.
<b>Response</b>	Wash with plenty of water.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** None.

**2.3. Other hazards** Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
2-Amino-2-(hydroxymethyl)propane-1, 3-diol hydrochloride	5 - <10	1185-53-1 214-684-5	-	-	
<b>Classification:</b>	Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335				
Sodium chloride	5 - 10	7647-14-5 231-598-3	01-2119485491-33-XXXX	-	
<b>Classification:</b>	-				

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved.

### 4.1. Description of first aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	For skin contact flush with large amounts of water while removing contaminated clothing. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	In case of contact, immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Get medical attention if irritation persists.
<b>Ingestion</b>	If material is ingested, immediately contact a physician or poison control centre.

**4.2. Most important symptoms and effects, both acute and delayed** Ingestion may cause irritation and malaise.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** The product is not flammable.

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with water spray, carbon dioxide, dry chemical or material appropriate for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.

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

### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>For emergency responders</b>	Use personal protection as recommended in section 8 of the SDS.

**6.2. Environmental precautions** Do not allow to enter drains, sewers or watercourses.

**6.3. Methods and material for containment and cleaning up** Absorb spill with vermiculite or other inert material. Dispose of waste in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling** Avoid contact with skin and eyes. Wash thoroughly after handling. In case of insufficient ventilation, wear suitable respiratory equipment. Handle and open container with care.

<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Store at 2-8°C (35-46°F). Store in a closed container away from incompatible materials.
<b>7.3. Specific end use(s)</b>	Research use only.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Recommended monitoring procedures</b>	Follow standard monitoring procedures.
<b>Derived no-effect level (DNEL)</b>	Not available.
<b>Predicted no effect concentrations (PNECs)</b>	Not available.

### 8.2. Exposure controls

**Appropriate engineering controls** Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

### Individual protection measures, such as personal protective equipment

<b>General information</b>	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<b>Eye/face protection</b>	Wear approved safety glasses or goggles.
<b>Skin protection</b>	
- Hand protection	Wear appropriate chemical resistant gloves.
- Other	Wear lab coat or other protective garments. Remove contaminated clothing promptly.
<b>Respiratory protection</b>	Under normal conditions, respirator is not normally required.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practices.
<b>Environmental exposure controls</b>	Inform appropriate managerial or supervisory personnel of all environmental releases.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Clear, colourless liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Colourless, clear.
<b>Odour</b>	Not available.
<b>Odour threshold</b>	Not available.
<b>pH</b>	7.4
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Water soluble.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.

<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not available.
<b>9.2. Other information</b>	No relevant additional information available.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non reactive under normal conditions of storage and transport.
<b>10.2. Chemical stability</b>	Stable under normal storage and handling conditions.
<b>10.3. Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.
<b>10.4. Conditions to avoid</b>	None under normal conditions.
<b>10.5. Incompatible materials</b>	Strong oxidizers, strong acids, and strong bases.
<b>10.6. Hazardous decomposition products</b>	None expected under normal conditions of use.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Inhalation</b>	Vapours may irritate throat and respiratory system and cause coughing.
<b>Skin contact</b>	Prolonged skin contact may cause redness, irritation and dry skin.
<b>Eye contact</b>	Splashes in the eyes may cause redness and irritation.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms** Ingestion may cause irritation and malaise.

### 11.1. Information on toxicological effects

**Acute toxicity** May cause discomfort if swallowed.

<b>Components</b>	<b>Species</b>	<b>Test results</b>
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Sodium chloride (CAS 7647-14-5)

#### **Acute**

##### *Dermal*

LD50	Rabbit	> 10000 mg/kg
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##### *Oral*

LD50	Rat	> 3980 mg/kg
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##### *Other*

LD50	Mouse	2602 mg/kg
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**Skin corrosion/irritation** Prolonged skin contact may cause redness, irritation and dry skin.

**Serious eye damage/eye irritation** May cause eye irritation.

**Respiratory sensitisation** Not classified.

**Skin sensitisation** No data available.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** Not classified.

**Reproductive toxicity** Not classified.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not classified.

**Mixture versus substance information** Not available.

**Other information** No other specific acute or chronic health impact noted.

## SECTION 12: Ecological information

### 12.1. Toxicity

Components	Species	Test results
Sodium chloride (CAS 7647-14-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 874 mg/l, 48 hours
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.	
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	Not available.	
<b>Mobility in general</b>	The product is soluble in water.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.	
<b>12.6. Other adverse effects</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	Waste codes should be assigned by the user based on the application for which the product was used.
<b>Disposal methods/information</b>	Dispose in accordance with all applicable regulations. Contract with a licensed chemical disposal agency.

## SECTION 14: Transport information

### ADR

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

### ADN

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Not listed.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended**

Not listed.

#### **Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Not listed.

**Directive 94/33/EC on the protection of young people at work**

Not listed.

#### **Other regulations**

This product does not meet the criteria for classification according to Regulation (EC) 1272/2008 (CLP Regulation) and Directive 67/548/EEC and their amendments respectively. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended.

#### **National regulations**

Follow national regulation for work with chemical agents.

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

#### **List of abbreviations**

DNEL: Derived No-Effect Level.  
PNEC: Predicted No-Effect Concentration.

#### **References**

Not available.

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### **Full text of any H-statements not written out in full under Sections 2 to 15**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

#### **Training information**

Follow training instructions when handling this material.

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