

# Material Safety Data Sheet



## Microbank™

### 1. Product and company identification

<b>Product name</b>	: Microbank™	<b>Code</b>
<b>Trade name</b>	: Microbank™ Microbank™ Microbank™ - Broth Only	PL.170 PL.160S PL.163S
<b>Material uses</b>	: Sterile vials, containing a cryopreservative & porous beads, which serve as carriers to support microorganisms.	
<b>Supplier/Manufacturer</b>	: Pro-Lab Diagnostics 20 Mural Street, Unit 4 Richmond Hill, ON Canada L4B 1K3 Tel: +1-905-731-0300 Fax: +1-905-731-0206 www.pro-lab.com	
<b>Validation date</b>	: 11/15/2008	
<b>Responsible name</b>	: Atrion Regulatory Services, Inc.	
<b>In case of emergency</b>	: 905-731-0300 –Monday to Friday 8:30 am to 5:00 pm Eastern Standard Time. 416-230-0692 –Outside the above hours.	

### 2. Hazards identification

<b>Physical state</b>	: Liquid. [Clear.]
<b>OSHA/HCS status</b>	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
<b>Emergency overview</b>	: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED. No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin and clothing.
<b>Routes of entry</b>	: Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Potential acute health effects</b>	
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin</b>	: No known significant effects or critical hazards.
<b>Eyes</b>	: No known significant effects or critical hazards.
<b>Potential chronic health effects</b>	
<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.
<b>Over-exposure signs/symptoms</b>	
<b>Inhalation</b>	: No specific data.
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: No specific data.
<b>Eyes</b>	: No specific data.

## 2. Hazards identification

**Medical conditions aggravated by over-exposure** : None known.

See toxicological information (section 11)

## 3. Composition/information on ingredients

### United States

Name	CAS number	%
Sucrose	57-50-1	10 - 30
Glycerin, (Glycerol)	56-81-5	5 - 10

### Canada

Name	CAS number	%
Sucrose	57-50-1	10 - 30
Glycerin, (Glycerol)	56-81-5	5 - 10

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Extinguishing media**
  - Suitable** : Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Storage** : Keep container tightly closed. Store at room temperature.

## 8 . Exposure controls/personal protection

<b>United States</b>	
<b>Product name</b> Sucrose	<b>Exposure limits</b> <b>ACGIH TLV (United States, 1/2008).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s). <b>NIOSH REL (United States, 12/2001).</b> TWA: 5 mg/m <sup>3</sup> 10 hour(s). Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hour(s). Form: Total <b>OSHA PEL (United States, 11/2006).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hour(s). Form: Total dust
Glycerin, (Glycerol)	<b>ACGIH TLV (United States, 1/2008).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s). Form: Mist <b>OSHA PEL (United States, 11/2006).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hour(s). Form: Total dust

<b>Canada</b>	
<b>Product name</b> Sucrose	<b>Exposure limits</b> <b>CA British Columbia Provincial (Canada, 7/2007).</b> TWA: 3 mg/m <sup>3</sup> 8 hour(s). Form: Respirable dust TWA: 10 mg/m <sup>3</sup> 8 hour(s). Form: Total dust <b>CA Quebec Provincial (Canada, 12/2006).</b> TWAEV: 10 mg/m <sup>3</sup> 8 hour(s). <b>CA Alberta Provincial (Canada, 10/2006).</b> 8 hrs OEL: 10 mg/m <sup>3</sup> 8 hour(s). <b>CA Ontario Provincial (Canada, 3/2007).</b> TWAEV: 10 mg/m <sup>3</sup> 8 hour(s). Form: total dust

## 8 . Exposure controls/personal protection

Glycerin, (Glycerol)

**CA Alberta Provincial (Canada, 10/2006).**  
 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hour(s). Form: Mist  
**CA British Columbia Provincial (Canada, 7/2007).**  
 TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: Mist  
 TWA: 3 mg/m<sup>3</sup> 8 hour(s). Form: Respirable mist  
**CA Ontario Provincial (Canada, 3/2007).**  
 TWAEV: 10 mg/m<sup>3</sup> 8 hour(s). Form: mist  
**CA Quebec Provincial (Canada, 12/2006).**  
 TWAEV: 10 mg/m<sup>3</sup> 8 hour(s). Form: mist

**Consult local authorities for acceptable exposure limits.**

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Respiratory** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): Disposable vinyl gloves.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: Safety glasses.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  
 Recommended: Lab coat.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

- Physical state** : Liquid. [Clear.]  
**Color** : Yellow. [Light]

## 10 . Stability and reactivity

- Stability** : The product is stable.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : No specific data.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials and acids.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Sucrose	Rat	29700 mg/kg	LD50 Oral	-
Glycerin, (Glycerol)	Rabbit	>10 g/kg	LD50 Dermal	-
	Rat	12600 mg/kg	LD50 Oral	-

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Eyes** : No known significant effects or critical hazards.

### Carcinogenicity

#### Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Sucrose	A4	-	-	-	-	-

## 12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Species	Exposure	Result
Glycerin, (Glycerol)	Fish	96 hours	Acute LC50 54 to 57 ml/L

- Other adverse effects** : No known significant effects or critical hazards.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

## 14 . Transport information

### Regulatory information

**DOT/ TDG / IMDG/ IATA** : Not regulated.

## 15 . Regulatory information

### United States

**HCS Classification** : Not regulated.

**U.S. Federal regulations** : **United States inventory (TSCA 8b)**: All components are listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances**: No products were found.

**SARA 302/304 emergency planning and notification**: No products were found.

**SARA 302/304/311/312 hazardous chemicals**: Sucrose; Glycerin, (Glycerol)

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**

Sucrose: Delayed (chronic) health hazard; Glycerin, (Glycerol): Immediate (acute) health hazard, Delayed (chronic) health hazard

**Clean Water Act (CWA) 307**: No products were found.

**Clean Water Act (CWA) 311**: Disodium Phosphate

**Clean Air Act (CAA) 112 accidental release prevention**: No products were found.

**Clean Air Act (CAA) 112 regulated flammable substances**: No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances**: No products were found.

### State regulations

: **Connecticut Carcinogen Reporting**: None of the components are listed.

**Connecticut Hazardous Material Survey**: None of the components are listed.

**Florida substances**: None of the components are listed.

**Illinois Chemical Safety Act**: None of the components are listed.

**Illinois Toxic Substances Disclosure to Employee Act**: None of the components are listed.

**Louisiana Reporting**: None of the components are listed.

**Louisiana Spill**: None of the components are listed.

**Massachusetts Spill**: None of the components are listed.

**Massachusetts Substances**: The following components are listed: Sucrose; Glycerin, (Glycerol)

**Michigan Critical Material**: None of the components are listed.

**Minnesota Hazardous Substances**: None of the components are listed.

**New Jersey Hazardous Substances**: None of the components are listed.

**New Jersey Spill**: None of the components are listed.

**New Jersey Toxic Catastrophe Prevention Act**: None of the components are listed.

**New York Acutely Hazardous Substances**: None of the components are listed.

**New York Toxic Chemical Release Reporting**: None of the components are listed.

**Pennsylvania RTK Hazardous Substances**: The following components are listed:

Sucrose; Glycerin, (Glycerol)

**Rhode Island Hazardous Substances**: None of the components are listed.

### Canada

**WHMIS (Canada)** : Not controlled under WHMIS (Canada).

**Canadian lists** : **CEPA Toxic substances**: None of the components are listed.

**Canadian ARET**: None of the components are listed.

**Canadian NPRI**: None of the components are listed.

**Alberta Designated Substances**: None of the components are listed.

**Ontario Designated Substances**: None of the components are listed.

**Quebec Designated Substances**: None of the components are listed.

**Canada inventory** : All components are listed or exempted.

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

### International regulations

## 15 . Regulatory information

**International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

## 16 . Other information

**Label requirements** : NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

**Hazardous Material Information System (U.S.A.)** :

### HAZARD RATINGS

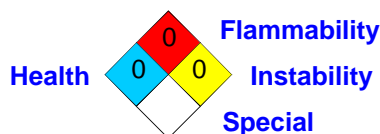
Health	0
Fire hazard	0
Physical Hazard	0
Personal protection	

4- Extreme  
3- Serious  
2- Moderate  
1- Slight  
0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)** :



**References** : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

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### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.