

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

078948002

N/A



10006 Cross Creek Blvd.,  
Suite 445  
Tampa, FL 33647

10/26/2022

TO WHOM IT MAY CONCERN:

**RE: ADIPOSE STEM CELL KIT LARGE**

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This product, which is manufactured by **Ardent Animal Health, LLC**, is a Kit and has multiple components. Please see the individual component SDS for the relevant information.

The respective components are:

<b>GSM-281009</b>	<b>MediStem™ Research Grade 5mg</b>
<b>GSM-281010</b>	<b>Phosphate Buffered Saline Solution</b>
<b>GSM-281011</b>	<b>Cell Extraction Medium</b>
<b>GSM-281013</b>	<b>ActiCell Activator Solution</b>

# MATERIAL SAFETY DATA SHEET

## MediStem™ Research Grade 5mg

Version 1.  
Printing date 18.06.2010

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product information**

Commercial Product Name:	MediStem™ Research Grade 5mg
Product Description:	Proteases
CAS:	9001-12-1, 9073-78-3
Intended use:	For <i>in vitro</i> use by professionals only
Company:	Ardent Animal Health LLC 220 Bellaire Drive Nicholasville, KY 40356
E-mail:	info@ardentanimalhealth.com
Telephone:	+1 859 885 7111
After Hours:	1800 356 9168

### 2. HAZARDS IDENTIFICATION

#### Risk advice to man and the environment

Classification: **Harmful**

Warnings: Irritating to eyes, respiratory system and skin.  
May cause sensitization by inhalation.

Note: Slightly hazardous to water and ground

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:** Proteases  
**Labelling:** X; R20/21/22/36-38

Ingredients >= 1 % Proteases; Labelling: X; R20/21/22/36-38

### 4. FIRST AID MEASURES

Inhalation:	Consult a doctor. Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Skin contact:	Rinse with plenty of water. If skin irritation persists, call a doctor. Remove and wash contaminated clothing before re-use.
Eye contact:	Promptly wash eyes with water for at least 15 minutes, ensuring eye lids are held open. Remove contact lens if worn. Seek medical advice.

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Ingestion: Consult a doctor immediately. Do not induce vomiting without medical advice.

Instructions for doctor: Symptomatic treatment by a doctor.

### 5. FIRE-FIGHTING MEASURES

Extinguishing media: No restriction. Use dry chemical, CO<sup>2</sup>, water spray or 'alcohol foam'.  
Decomposition: Dangerous decomposition is not anticipated.

### 6. ACCIDENTAL RELEASE MEASURES

Actions to be taken on spillage: Sweep up spilled solids in dry condition, avoiding dust formation.

Absorbent material: Not necessary.

Actions to be taken to limit damage: Special measures to limit damage are not necessary.

### 7. HANDLING AND STORAGE

Handling: Combustible substance. Avoid formation of dust; dust extraction by suction is required for procedures associated with dust formation.

Storage: 4°C. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

Use: Single use with Adipose Stem Cell Procedure Kit only

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: Respiratory protection should be worn.

Eye protection: Safety glasses

Hand protection: Protective gloves

Hygiene measures: Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Solid

Colour: White

Odour: None

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Fire promoting:	Substance does not have any oxidizing properties.
Miscibility with water:	Immiscible
Water solubility:	Soluble

### 10. STABILITY AND REACTIVITY

Hazardous reactions:	none under normal use
Hazardous decomposition products:	Carbon oxides
Materials to avoid:	Strong acids and bases. Strong oxidising agents.

### 11. TOXICOLOGICAL INFORMATION

#### Toxicological information for the product

Intoxication has so far not become known.

### 12. ECOLOGICAL INFORMATION

Bioaccumulation:	Not determined
Aquatic Toxicity:	No data is available
Ecotoxicity effects:	No data is available

### 13. DISPOSAL CONSIDERATIONS

Waste disposal route:	Can be sent to an incineration plant in accordance with local regulations.
Disposal of empty packaging:	Dispose of empty packs via local recycling or waste disposal routes- if necessary, clean them beforehand.

### 14. TRANSPORT INFORMATION

Is not subject to current regulations for transportation of dangerous goods

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### 15. REGULATORY INFORMATION

#### Labelling

Hazard symbol:

Warnings:

Safety advice:

#### Harmful

Irritating to eyes, respiratory system and skin.  
May cause sensitisation by inhalation.

Do not breathe dust.

Avoid contact with the skin

In case of contact with eyes, rinse immediately  
with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

For professional use only  
For *in vitro* use only

### 16. OTHER INFORMATION

#### Further information

The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed.

# MATERIAL SAFETY DATA SHEET

## Cell Extraction Medium

Version 1.  
Printing date 18.06.2010

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### Product information

Commercial Product Name:	Cell Extraction Medium
Product Description:	Soy Lecithin-derived
Intended use:	Cell culture medium for in vitro use only by a professional
CAS:	8002-43-5
Company:	Ardent Animal Health LLC 220 Bellaire Drive Nicholasville, KY 40356
E-mail:	info@ardentanimalhealth.com
Telephone:	+1 859 885 7111
After Hours:	1800 356 9168

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### 2. HAZARDS IDENTIFICATION

#### Risk advice to man and the environment

Classification:	Not hazardous
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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:	Soy Lecithin (Phosphatidyl choline)
Chemical class:	Glyceryl Esters and Derivatives
Functions:	Surfactant- Emulsifying agent

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### 4. FIRST AID MEASURES

Inhalation:	Move victim to fresh air.
Skin contact:	If material contacts skin flush with water
Eye contact:	May cause eye irritation. Flush thoroughly with water and remove contact lens if worn. If irritation persists seek medical advice
Ingestion:	May be harmful if swallowed. DO NOT induce vomiting, give patient 2-3 cups of milk or water. Seek medical advice.

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## Cell Extraction Medium

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### 5. FIRE-FIGHTING MEASURES

Extinguishing media:	Use extinguishing media appropriate to surrounding fire conditions.
Decomposition:	Dangerous decomposition is not anticipated.

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### 6. ACCIDENTAL RELEASE MEASURES

Upon spillage:	Wear goggles, rubber boots and rubber gloves. Using an absorbant cloth wipe spill site. Using warm water and any household dishwashing liquids wash spill site with a fresh cloth, ventilate area to dry.
Absorbent material:	Not necessary.
Actions to be taken to limit damage:	Special measures to limit damage are not necessary.

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### 7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes
Storage:	Vials to be refrigerated at 4°C.
Use:	Single use with Adipose Stem Cell Procedure Kit only

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment	
Respiratory protection:	Use dust mask type N95 (US)
Eye protection:	Chemical safety goggles
Hand protection:	Compatible chemical resistant gloves
Hygiene measures:	Wash hands before breaks and at the end of workday.



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## Cell Extraction Medium

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Amber Liquid
pH:	~7
Odour:	Characteristic

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### 10. STABILITY AND REACTIVITY

Hazardous reactions:	Stable under normal conditions
Hazardous decomposition products:	Unknown
Materials to avoid:	Strong acids, strong alcohol, strong oxidising agents.
Conditions to avoid:	Strong heat

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### 11. TOXICOLOGICAL INFORMATION

#### Toxicological information for the product

Potentially biohazardous material  
May cause eye irritation

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### 12. ECOLOGICAL INFORMATION

Bioaccumulation:	Not determined
Aquatic Toxicity:	No data is available
Ecotoxicity effects:	No data is available

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### 13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with existing disposal practices employed for infectious waste at your institution. Observe all federal, state and local environmental regulations.

# MATERIAL SAFETY DATA SHEET

## Cell Extraction Medium

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### 14. TRANSPORT INFORMATION

Is not subject to current regulations for transportation of dangerous goods

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### 15. REGULATORY INFORMATION

#### Labeling

Hazard symbol:	Not hazardous
Warnings:	Do not use if known cell hypersensitivity to soy.
Safety advice:	For use by professionals only For in-vitro use only

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### 16. OTHER INFORMATION

#### Further information

The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed.

# MATERIAL SAFETY DATA SHEET

## ActiCell™ Activator Solution

Version 1.  
Printing date 18.06.2010

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### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### Product information

Commercial Product Name:	ActiCell™ Activator Solution
Product Description:	Calcium Chloride Solution
Intended Use:	For use only by a professional
CAS:	10043-52-4
Company:	Ardent Animal Health LLC 220 Bellaire Drive Nicholasville, KY 40356
E-mail:	info@ardentanimalhealth.com
Telephone:	+1 859 885 7111
After Hours:	1800 356 9168

### 2. HAZARDS IDENTIFICATION

#### Risk advice to man and the environment

Classification: Not hazardous

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Ingredients:</b>	Calcium chloride solution
Chemical class:	Inorganic salts
Functions:	Clot (blood) activation agent

### 4. FIRST AID MEASURES

Inhalation:	Move victim to fresh air.
Skin contact:	If material contacts skin flush with water
Eye contact:	May cause eye irritation. Flush thoroughly with water and remove contact lens if worn. If irritation persists seek medical advice
Ingestion:	May be harmful if swallowed. Induce vomiting immediately. Seek medical advice.

# MATERIAL SAFETY DATA SHEET

## ActiCell™ Activator Solution

Version 1.  
Printing date 18.06.2010

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### 5. FIRE-FIGHTING MEASURES

Extinguishing media: Use extinguishing media appropriate to surrounding fire conditions.

Decomposition: Dangerous decomposition is not anticipated.

### 6. ACCIDENTAL RELEASE MEASURES

Upon spillage: Wear goggles, rubber boots and rubber gloves. Using an absorbant cloth wipe spill site. Using warm water and any household dishwashing liquids wash spill site with a fresh cloth, ventilate area to dry.

Absorbent material: Not necessary.

Actions to be taken to limit damage: Special measures to limit damage are not necessary.

### 7. HANDLING AND STORAGE

Handling: Avoid contact with eyes

Storage: Keep unopened vials refrigerated at 4°C.

Use: Single use with Adipose Stem Cell Procedure Kit only

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: Use dust mask type N95 (US)

Eye protection: Chemical safety goggles

Hand protection: Compatible chemical resistant gloves

Hygiene measures: Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Clear Liquid

pH: ~7

Odour: Characteristic

# MATERIAL SAFETY DATA SHEET

## ActiCell™ Activator Solution

Version 1.  
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### 10. STABILITY AND REACTIVITY

Hazardous reactions:	Stable under normal conditions
Hazardous decomposition products:	Unknown
Materials to avoid:	Strong acids, strong alcohol, strong oxidising agents.
Conditions to avoid:	Strong heat

### 11. TOXICOLOGICAL INFORMATION

#### Toxicological information for the product

Potentially biohazardous material  
May cause eye irritation

### 12. ECOLOGICAL INFORMATION

Bioaccumulation:	Not determined
Aquatic Toxicity:	No data is available
Ecotoxicity effects:	No data is available

### 13. DISPOSAL CONSIDERATIONS

Disposal should be made in accordance with existing disposal practices employed for infectious waste at your institution. Observe all federal, state and local environmental regulations.

### 14. TRANSPORT INFORMATION

Is not subject to current regulations for transportation of dangerous goods

# MATERIAL SAFETY DATA SHEET

## ActiCell™ Activator Solution

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### 15. REGULATORY INFORMATION

#### Labeling

Hazard symbol:	Not hazardous
Warnings:	Do not use if known cell hypersensitivity to calcium.
Safety advice:	For use by professionals only

### 16. OTHER INFORMATION

#### Further information

The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed.

Ardent Solution A,D, & F  
Material Safety Data Sheet  
Phosphate Buffered Saline Solution

Section 1 - Chemical Product and Company Identification

MSDS Name: Phosphate Buffered Saline Solution  
Catalog Numbers: BP2438-20, BP2438-4  
Synonyms: PBS.

Section 2 - Composition, Information on Ingredients

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Risk Phrases:

CAS#: 7647-14-5  
Chemical Name: Sodium Chloride  
%: 5-10  
EINECS#: 231-598-3  
Hazard Symbols:

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Risk Phrases:

CAS#: 7732-18-5  
Chemical Name: Water  
%: 87+  
EINECS#: 231-791-2  
Hazard Symbols:

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Risk Phrases:

CAS#: 7758-11-4  
Chemical Name: Potassium phosphate dibasic  
%: 0-5  
EINECS#: 231-834-5  
Hazard Symbols:

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Risk Phrases:

CAS#: 7778-77-0  
Chemical Name: Potassium phosphate monobasic  
%: <1.0  
EINECS#: 231-913-4  
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: None listed

Risk Phrases: None listed

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Caution! This is expected to be a low hazard for usual industrial handling. May cause eye, skin, and respiratory tract irritation. Target Organs: None.

#### Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. Low hazard for usual industrial handling.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic: No information found.

### Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to  
Physician:

### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Provide ventilation.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. No special precautions indicated.



## Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium Chloride	none listed	none listed	none listed
Water	none listed	none listed	none listed
Potassium phosphate dibasic	none listed	none listed	none listed
Potassium phosphate monobasic	none listed	none listed	none listed

OSHA Vacated PELs: Sodium Chloride: None listed Water: None listed Potassium phosphate dibasic: None listed Potassium phosphate monobasic: None listed

### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to minimize contact with skin.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a

**Respirators:** NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear, colorless

Odor: weak odor

pH: Not available

Vapor Pressure: Not available

Vapor Density: >1.0

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: > 100 deg C (> 212.00°F)

Freezing/Melting Point: > 0 deg C (> 32.00°F)

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density:

Molecular Formula: Solution

Molecular Weight: 0

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials, excess heat.

**Incompatibilities with Other Materials** Strong acids, strong bases.

**Hazardous Decomposition Products** Carbon monoxide, carbon monoxide, carbon dioxide.

**Hazardous Polymerization** Has not been reported.

## Section 11 - Toxicological Information

CAS# 7647-14-5: VZ4725000

CAS# 7732-18-5: ZC0110000

RTECS#: CAS# 7758-11-4: None listed  
CAS# 7778-77-0: TC6615500  
RTECS:  
**CAS# 7647-14-5:** Draize test, rabbit, eye: 100 mg Mild;  
Draize test, rabbit, eye: 100 mg/24H Moderate;  
Draize test, rabbit, eye: 10 mg Moderate;  
Draize test, rabbit, skin: 50 mg/24H Mild;  
Draize test, rabbit, skin: 500 mg/24H Mild;  
Inhalation, rat: LC50 = >42 gm/m3/1H;  
Oral, mouse: LD50 = 4 gm/kg;  
Oral, rat: LD50 = 3000 mg/kg;  
LD50/LC50: Skin, rabbit: LD50 = >10 gm/kg;  
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RTECS:  
**CAS# 7732-18-5:** Oral, rat: LD50 = >90 mL/kg;  
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RTECS:  
**CAS# 7758-11-4:.**  
RTECS:  
**CAS# 7778-77-0:** Skin, rabbit: LD50 = >4640 mg/kg;  
.  
Sodium Chloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Carcinogenicity: Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Potassium phosphate dibasic - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Potassium phosphate monobasic - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT  
Shipping Name: Not regulated as a hazardous material  
Hazard Class:  
UN Number:  
Packing Group:  
Canada TDG  
Shipping Name: Not available  
Hazard Class:  
UN Number:  
Packing Group:

Section 15 - Regulatory Information

European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols:Not available  
Risk Phrases:  
Safety Phrases:  
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)  
CAS# 7647-14-5: 0  
CAS# 7732-18-5: Not available  
CAS# 7758-11-4: 1

Canada

CAS# 7647-14-5 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

CAS# 7758-11-4 is listed on Canada's DSL List

CAS# 7778-77-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

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

CAS# 7647-14-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 7758-11-4 is not listed on Canada's Ingredient Disclosure List.

CAS# 7778-77-0 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 7647-14-5 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 7758-11-4 is listed on the TSCA Inventory.

CAS# 7778-77-0 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 1/11/2000

Revision #10 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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