

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### **SECTION 1: Identification**

JECHO	TT I. IUCIIIIICUIIII			
1.1.	Identification			
Product form		: Mixture		
Product name		: MACRODUCT Supply Kit or Pilogel Discs		
Product code		: SS-032, SS-032G, SS-032IT, SS-032-ND, SS-032G-ND, SS-023, SS-023G, or SS-023IT		
1.2. Relevant identified uses of the substance		mixture and uses advised against		
Use of the substance/mixture		: Sweat Induction for Diagnosis of Cystic Fibrosis		
1.3.	Details of the supplier of the safety data she	eet		
370 Wes Logan, U T +1 (435	iroup Inc. t 1700 South T 84321 - USA 5) 752-6011 - F +1 (435) 752-4127 5@elitechgroup.com - www.elitechgroup.com			
1.4.	Emergency telephone number			
Emerge	ency number	<ul> <li>Contact your distributor or poison control center in your country. InfoTrac Emergency Response: Calls within the USA, phone: 1-800-535-5053. Calls outside the USA, phone: +1 352-323-3500 (call collect) Customer ID: #90104 (NOTE: this number is required when a customer calls into either phone number above).</li> </ul>		

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Acute Tox. 4 (Oral) H302 - Harmful if swallowed Full text of H statements : see section 16

#### 2.2. Label elements

#### **GHS US labeling**

Hazard pictograms (GHS US)	: GH507
Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: H302 - Harmful if swallowed
Precautionary statements (GHS US)	<ul> <li>P102 - Keep out of reach of children.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P301+P312 - If swallowed: Call a POISON CENTER, a doctor if you feel unwell.</li> <li>P330 - Rinse mouth.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.</li> </ul>
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS US)	
Not applicable	

### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

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Name	6	Product identifier	%		GHS US classification
	rpine nitrate	(CAS-No.) 148-72-1	<		Acute Tox. 2 (Oral), H300
					Acute Tox. 2 (Inhalation), H330
	of H-phrases: see section 16				
	IN 4: First aid measures				
.1.	Description of first aid measures			. 11	
	d measures general	: Call a poison center/doctor/p			
	d measures after inhalation	: Remove person to fresh air ar	-	breathing.	
	d measures after skin contact	: Wash skin with plenty of wate			
	d measures after eye contact	: Rinse eyes with water as a pre			
First-aid measures after ingestion       : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.					vell.
4.2. Most important symptoms and effects, both acute and delayed					
	oms/effects after ingestion	: Swallowing a small quantity o		in serious h	ealth hazard.
.3.	Indication of any immediate medica	l attention and special treatment neede	d		
reat syn	nptomatically.				
ECTIO	N 5: Firefighting measures				
.1.	Extinguishing media				
Suitable	e extinguishing media	: Water spray. Dry powder. Foa	m.		
Unsuita	able extinguishing media	: Do not use a heavy water stre	am.		
.2.	Special hazards arising from the sub	stance or mixture			
Reactiv	/ity	: The product is non-reactive up	nder normal conditions	of use, stora	ge and transport.
.3.	Advice for firefighters				
Firefigh	nting instructions	: Use water spray or fog for coor Prevent fire-fighting water fro			ution when fighting any chemical fi
Protect	tion during firefighting	: Do not attempt to take action apparatus. Complete protecting		tive equipm:	ent. Self-contained breathing
ECTIO	N 6: Accidental release measu	roc			
.1.		uipment and emergency procedures			
	For non-emergency personnel				
11					
.1.1. Emorge		· Vontilato chillago area			
	ency procedures	: Ventilate spillage area.			
		: Ventilate spillage area.			
Emerge . <b>1.2.</b>	ency procedures			tive equipm:	ent. For further information refer to
Emerge . <b>1.2.</b> Protect	ency procedures For emergency responders	: Do not attempt to take action		tive equipm:	ent. For further information refer to
Emerge . <b>1.2.</b> Protect	ency procedures For emergency responders tive equipment	: Do not attempt to take action section 8: "Exposure controls/		ctive equipm	ent. For further information refer to
Emerge <b>.1.2.</b> Protect Emerge	ency procedures For emergency responders tive equipment ency procedures	: Do not attempt to take action section 8: "Exposure controls/		ctive equipm	ent. For further information refer to
Emerge <b>.1.2.</b> Protect Emerge	ency procedures For emergency responders tive equipment ency procedures Environmental precautions	<ul> <li>Do not attempt to take action section 8: "Exposure controls/</li> <li>Ventilate area.</li> </ul>		tive equipm	ent. For further information refer to
Emerge .1.2. Protect Emerge .2. woid rel .3.	ency procedures For emergency responders tive equipment ency procedures Environmental precautions lease to the environment.	<ul> <li>Do not attempt to take action section 8: "Exposure controls/</li> <li>Ventilate area.</li> </ul>	personal protection".	tive equipm	ent. For further information refer to
Emerge <b>.1.2.</b> Protect Emerge <b>.2.</b> woid rel <b>.3.</b> Method	ency procedures For emergency responders tive equipment ency procedures Environmental precautions lease to the environment. Methods and material for containm	<ul> <li>Do not attempt to take action section 8: "Exposure controls,</li> <li>Ventilate area.</li> </ul> ent and cleaning up <ul> <li>Mechanically recover the processing the processi</li></ul>	personal protection". luct.		ent. For further information refer to
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Emerge .1.2. Protect Emerge .2. woid rel .3. Method Other in .4. or furth ECTIO	ency procedures For emergency responders tive equipment ency procedures Environmental precautions lease to the environment. Methods and material for containm ds for cleaning up nformation Reference to other sections er information refer to section 13. NT: Handling and storage	<ul> <li>Do not attempt to take action section 8: "Exposure controls,</li> <li>Ventilate area.</li> </ul> ent and cleaning up <ul> <li>Mechanically recover the processing the processi</li></ul>	personal protection". luct.		ent. For further information refer to
Emerge .1.2. Protect Emerge .2. .void rel .3. Method Other in .4. or furth ECTIO .1.	ency procedures For emergency responders tive equipment ency procedures Environmental precautions lease to the environment. Methods and material for containment ds for cleaning up nformation Reference to other sections uer information refer to section 13. DN 7: Handling and storage Precautions for safe handling	<ul> <li>Do not attempt to take action section 8: "Exposure controlsy</li> <li>Ventilate area.</li> <li>ent and cleaning up</li> <li>Mechanically recover the prod</li> <li>Dispose of materials or solid r</li> </ul>	personal protection". luct. esidues at an authorized	d site.	
Emerge a.1.2. Protect Emerge a.2. woid rel a.3. Method Other in a.4. or furth ECTIO .1. Precaut	Ency procedures For emergency responders tive equipment Ency procedures Environmental precautions lease to the environment. Methods and material for containment ds for cleaning up nformation Reference to other sections her information refer to section 13. DN 7: Handling and storage Precautions for safe handling tions for safe handling	<ul> <li>Do not attempt to take action section 8: "Exposure controls,</li> <li>Ventilate area.</li> <li>ent and cleaning up         <ul> <li>Mechanically recover the prod</li> <li>Dispose of materials or solid r</li> <li>Ensure good ventilation of the</li> </ul> </li> </ul>	personal protection". luct. esidues at an authorized	d site. rsonal protee	ctive equipment.
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Emerge .1.2. Protect Emerge .2. woid rel .3. Method Other in .4. or furth ECTIO .1. Precaut Hygiend .2. Storage	Ency procedures For emergency responders tive equipment Ency procedures Environmental precautions lease to the environment. Methods and material for containment ds for cleaning up nformation Reference to other sections ter information refer to section 13. DN 7: Handling and storage Precautions for safe handling tions for safe handling e measures	<ul> <li>Do not attempt to take action section 8: "Exposure controls,"</li> <li>Ventilate area.</li> <li>ent and cleaning up         <ul> <li>Mechanically recover the prod</li> <li>Dispose of materials or solid r</li> <li>Ensure good ventilation of the</li> <li>Do not eat, drink or smoke wh</li> </ul> </li> </ul>	personal protection". Juct. esidues at an authorized work station. Wear pe ten using this product. A	d site. rsonal protee	ctive equipment.

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SECTIC	ON 8: Exposure controls/personal pr	ote	ection
8.1.	Control parameters		
No addit	ional information available		
8.2.	Exposure controls		
Approp	priate engineering controls	:	Ensure good ventilation of the work station.
Person	al protective equipment	:	Avoid all unnecessary exposure.
Hand p	protection	:	Wear protective gloves. The glove material has to be impermeable and resistant to the product/the substance/the preparation. Use equipment tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Materials including natural rubber latex or nitrile with a material thickness of 4-6 mm are suggested for general use, however the selection of suitable gloves does not only depend on the material, but also on other marks of quality. Quality may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance and penetration time/breakthrough time of the glove material cannot be calculated/observed in advance and therefore has to be checked prior to the application.
Eye pro	otection	:	Chemical goggles or safety glasses.
Skin ar	nd body protection	:	Wear suitable protective clothing.
Respira	atory protection	:	Wear appropriate mask.
Enviro	nmental exposure controls	:	Avoid release to the environment.
Other i	information	:	Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

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

9.1. Information on basic physical and chemi	cal properties
Physical state	: Solid
Color	: Semi-clear; amber
Odor	: Characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: Not applicable
Relative vapor density at 20 °C	: No data available
Solubility	: Water: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
9.2. Other information	

No additional information available

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

.1. Information on toxicological effects	
Acute toxicity	: Not classified
MACRODUCT Supply Kit or Pilogel Discs	
ATE US (oral)	500 mg/kg body weight
Pilocarpine nitrate (148-72-1)	
LD50 oral rat	911 mg/kg
ATE US (oral)	5 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.5 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
	Based on available data, the classification criteria are not met
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Harmful if swallowed.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
ECTION 12: Ecological information	

### 12.2. Persistence and degradability

Ecology - general

	12.2. resistence and degradability				
	MACRODUCT Supply Kit or Pilogel Discs				
	Persistence and degradability	Not established.			
12	12.3. Bioaccumulative potential				
ĺ	MACRODUCT Supply Kit or Pilogel Discs				
	Bioaccumulative potential	Not established.			
12.4. Mobility in soil					
N	No additional information available				
12	2.5. Other adverse effects				
(	Other information :	Avoid release to the environment.			

environment.

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the

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SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Waste treatment methods		iner in accordance with licensed collector's sorting instructions.	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/containe to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.		
Ecology - waste materials	: Avoid release to the enviro	nment.	
SECTION 14: Transport information			
Department of Transportation (DOT)			
In accordance with DOT			
Not regulated for transport			
Transportation of Dangerous Goods			
No additional information available			
Transport by sea			
No additional information available			
Air transport			
No additional information available			
SECTION 15: Regulatory information			
15.1. US Federal regulations			
Pilocarpine nitrate (148-72-1)			
Listed on the United States TSCA (Toxic Substances Con	trol Act) inventory		
No additional information available EU-Regulations No additional information available National regulations No additional information available IS.3. US State regulations No additional information available			
SECTION 16: Other information			
Data sources	December 2008 on classific repealing Directives 67/548	/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 cation, labeling and packaging of substances and mixtures, amending and B/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.	
Abbreviations and acronyms	European Agreement conc Toxicity Estimate. Biologica Packaging Regulation; Regu Level. Median effective cor Air Transport Association. I Median lethal dose. Lowes No-Observed Adverse Effec Persistent Bioaccumulative Authorisation and Restricti	erning the International Carriage of Dangerous Goods by Inland Waterways. erning the International Carriage of Dangerous Goods by Road. Acute al limit value. Chemical Abstract Service number. Classification Labelling ulation (EC) No 1272/2008. Derived Minimal Effect level. Derived-No Effect incentration. European Community number. European Standard. International International Maritime Dangerous Goods. Median lethal concentration. It Observed Adverse Effect Level. No-Observed Adverse Effect Concentration ct Level. No-Observed Effect Concentration. Occupational Exposure Limit. Proxic. Predicted No-Effect Concentration. Registration, Evaluation, on of Chemicals Regulation (EC) No 1907/2006. Regulations concerning the angerous Goods by Rail. Safety Data Sheet. Very Persistent and Very azard Class.	
Other information	: None.		
Full text of H-phrases:			
H300		Fatal if swallowed	
H302		Harmful if swallowed	
H330		Fatal if inhaled	

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SDS US Custom - EBS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Reason For Change: Updated information in latest GHS format to meet compliance.