## This SDS packet was issued with item:

076313068

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

075452669 075452693 075452727 076313001 076313019 076313050 078877706 078915926

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 1:	PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Lidocaine hydrochloride 2% and Epinephrine 1:50,000 Injection Lidocaine hydrochloride 2% and Epinephrine 1:100,000 Injection				
Brand Name:	OCTOCAINE® 50 (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)  LIGNOSPAN® FORTE (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)  OCTOCAINE® 100 (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)  LIGNOSPAN® STANDARD (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)				
Manufacturer / Supplier:	Novocol Pharmaceutical of Canada, Inc. P. O. Box 68 Cambridge, Ontario, Canada N1R 5S9 519-623-4800 http://www.septodont.ca/				
Prepared By:	Novocol Pharmaceutical in conjunction with a third party consultant				
Emergency Phone Number:	1-800-647-0643 (please follow prompts)				
Product Use:	Local anesthetic solution for use in peripheral nerve blocks				
Date of Preparation:	August 15, 2010				

SECTION 2:	HAZARDS IDENTIFICATION

Emergency Overview:	Clear, odourless liquid May cause eye irritation Causes central nervous system effects such as drowsiness, confusion, excitability and nervousness. Acts as a depressant on the cardiovascular system. Avoid use in individuals with hypersensitivities to amide-type anesthetics. Use with caution in individuals with diabetes and/or severe hypertension.  Not WHMIS-Controlled			
WHMIS Regulatory Status:				
Potential Health Effects:	Routes of Exposure: eye, skin, ingestion Eye: May cause irritation, allergic reaction Skin: May cause irritation, allergic reaction Ingestion: Not available Chronic Effects: May cause hypersensitivity Signs and Symptoms of Overexposure: Drowsiness, confusion, excitability, nervousness, drop in blood pressure, fatigue, bluish discoloration of fingernails, lips, or skin, difficulties in breathing. CONSULT PRODUCT INSERT FOR CLINICAL AND PHARMACOPIAL INFORMATION			
Potential Environmental Effects:	Not available			

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Concentration (Percent weight/weight)	CAS Number	LD <sub>50</sub>	LC <sub>50</sub>	
Lidocaine Hydrochloride	2	137-58-6	292 mg/kg oral mouse	Not available	
Epinephrine	0.001 - 0.002	51-43-4	5 mg/kg dermal rat	Not available	

#### SECTION 4: FIRST AID MEASURES

Inhalation:	Remove patient from exposure.		
Eye Contact:	Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation persists.		
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water		
Ingestion:	Get immediate medical attention Do not induce vomiting unless instructed to do so by poison control or physician.		

## SECTION 5: FIRE FIGHTING MEASURES

Conditions of Flammability:	Not flammable			
Means of Extinction:	Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials			
Sensitivity to Mechanical Impact:	No			
Sensitivity to Static Discharge:	No			
Hazardous Combustion Products:	Not available			
Special Protective Actions for Firefighters:	As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing			

SECTION 6:	ACCIDENTAL RELEASE MEASURES			

Leak and Spill Procedure:	Clean up spills with normal procedures used for non-nazardous liquids. This can include: absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly with water to remove residual contamination.		
Other Information:	Caution against ingestion and contact with eyes is recommended. Wear safety glasses with sideshields.		

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 7: HANDLING AND STORAGE	
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Handling Procedures and Equipment:	Caution should be used to prevent against ingestion and contact with eyes. Handle with care to avoid breakage.		
Storage Requirements:	Store in a cool, dry place. Avoid extremes in temperature.		
Packaging:	USP Type 1 glass cartridges with rubber stopper and cap		

#### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:		Occupational Exposure Limits (OEL)			
	Chemical Agent	ACGIH*		Ontario	
	Agent	TWA <sup>b</sup>	\$TEL°	ΤWA <sup>b</sup>	STEL°
	Lidocaine Hydrochloride	Not available	Not available	Not available	Not available
	Epinephrine	Not available	Not available	Not available	Not available
a – American Conference of Governmental Industr     b – Time Weighted Average     c - Short-term Exposure Limit  Personal Protective Equipment (PPE):	ial Hygienists				
Gloves (specify):	Not normally	required			···-
Respiratory (specify):	Not normally required				
Eye (specify):	Not normally required				
Footwear (specify):	Not normally required				
Other Equipment (specify):	RESUSCITATIVE EQUIPMENT AND DRUGS SHOULD BE AVAILABLE DURING DENTAL PROCEDURES				
Engineering Controls (e.g. ventilation, enclosed process, specify):	Not normally required				

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Odour and Appearance:	Clear and odourless
Odour Threshold:	Not applicable
Specific Gravity (water=1):	1
Solubility in Water	Soluble
Co-efficient of Water/Oil Distribution:	Not available
Vapour Pressure:	17 mm Hg @ 20°C
Boiling Point (°C):	100°C

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Melting/Freezing Point (°C):	0°C
pH:	Not available
Vapour Density (Air=1):	0.6
Evaporation Rate (Butyl Acetate=1):	1
Flashpoint (°C) and Method:	Not flammable (water based)
Upper Flammable Limit (%):	Not available
Lower Flammable Limit (%):	Not available
Auto-ignition Temperature (°C):	Not available

## SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable
Incompatible Materials:	Incompatible with compounds which react violently with water
Conditions of Reactivity:	None
Hazardous Decomposition Products:	None

# SECTION 11: TOXICOLOGICAL INFORMATION

Route of Entry:	⊠ Skin Contact   Skin Absorption   Eye Contact   Inhalation   Ingestion
Irritancy to Product:	Not available
Synergistic Products:	Not available
Carcinogenicity:	This product has not been listed as a carcinogen or a potential carcinogen by the ACGIH, the International Agency for Research on Cancer (IARC), the US National Toxicology Program (NTP) or the US Occupational Safety and Health Administration (OSHA).
Reproductive Toxicity:	Not available
Teratogenicity:	No significant effects were observed on fetal development. However, animal studies have found that continuous exposure throughout pregnancy may decrease birth weight.
Mutagenicity:	Not available
Sensitivity to Product:	Not available

# SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Not available
Persistence / Degradability:	Not available
Bioaccumulation / Accumulation:	Not available

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Mobility in Environmental Media:	Not available
Other Adverse Effects:	Not available

SECTION 13:	DISPOSAL CONSIDERATIONS	
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Disposal:	Observe all Federal/Provincial/State and Local disposal regulations.
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#### SECTION 14: TRANSPORTATION INFORMATION

Basic Shipping Description:	Not available
Additional Information:	Not available
Special Precautions:	Avoid temperature extremes. Prevent from freezing.

#### SECTION 15: REGULATORY INFORMATION

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.	
OSHA Regulatory Status:	Epinephrine is listed as a hazardous product in the RCRA (EPA) and CERCLA (EPA) regulations.
Regulatory Status:	This product is exempt from WHMIS as a drug product

## SECTION 16: OTHER INFORMATION

Name of person or group that prepared MSDS:	Novocol Pharmaceutical in conjunction with a third party consultant
Phone #:	519-623-4800
MSDS Version#:	# 3 (replaces V.2 of March 9, 2007)

Information and statements contained in this document have been obtained from manufacturers, suppliers and recognized reference sources as provided to or obtained by Novocol Pharmaceutical of Canada, Inc.

Novocol Pharmaceutical of Canada, Inc. believes the information to be reliable but expressly disclaims any liability for providing such information and toxicology to our customers.

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 1:	PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Lidocaine hydrochloride 2% and Epinephrine 1:50,000 Injection Lidocaine hydrochloride 2% and Epinephrine 1:100,000 Injection
Brand Name:	OCTOCAINE® 50 (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)  LIGNOSPAN® FORTE (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)  OCTOCAINE® 100 (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)  LIGNOSPAN® STANDARD (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)
Manufacturer / Supplier:	Novocol Pharmaceutical of Canada, Inc. P. O. Box 68 Cambridge, Ontario, Canada N1R 5S9 519-623-4800 http://www.septodont.ca/
Prepared By:	Novocol Pharmaceutical in conjunction with a third party consultant
Emergency Phone Number:	1-800-647-0643 (please follow prompts)
Product Use:	Local anesthetic solution for use in peripheral nerve blocks
Date of Preparation:	August 15, 2010

# SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview:	Clear, odourless liquid
	May cause eye irritation
	Causes central nervous system effects such as drowsiness, confusion, excitability and nervousness. Acts as a depressant on the cardiovascular system.
	Avoid use in individuals with hypersensitivities to amide-type anesthetics. Use with caution in individuals with diabetes and/or severe hypertension.
WHMIS Regulatory Status:	Not WHMIS-Controlled
Potential Health Effects:	Routes of Exposure: eye, skin, ingestion Eye: May cause irritation, allergic reaction Skin: May cause irritation, allergic reaction Ingestion: Not available Chronic Effects: May cause hypersensitivity Signs and Symptoms of Overexposure: Drowsiness, confusion, excitability, nervousness, drop in blood pressure, fatigue, bluish discoloration of fingernails, lips, or skin, difficulties in breathing. CONSULT PRODUCT INSERT FOR CLINICAL AND PHARMACOPIAL INFORMATION
Potential Environmental Effects:	Not available

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Concentration (Percent weight/weight)	CAS Number	LD <sub>50</sub>	LC <sub>50</sub>
Lidocaine Hydrochloride	2	137-58-6	292 mg/kg oral mouse	Not available
Epinephrine	0.001 - 0.002	51-43-4	5 mg/kg dermal rat	Not available

#### SECTION 4: FIRST AID MEASURES

Inhalation:	Remove patient from exposure.
Eye Contact:	Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation persists.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water
Ingestion:	Get immediate medical attention Do not induce vomiting unless instructed to do so by poison control or physician.

## SECTION 5: FIRE FIGHTING MEASURES

Conditions of Flammability:	Not flammable
Means of Extinction:	Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials
Sensitivity to Mechanical Impact:	No
Sensitivity to Static Discharge:	No
Hazardous Combustion Products:	Not available
Special Protective Actions for Firefighters:	As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing

SECTION 6:	ACCIDENTAL RELEASE MEASURES
Leak and Spill Procedure:	Clean up spills with normal procedures used for non-hazardous liquids. This can include: absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly with water to remove residual contamination.
Other Information:	Caution against ingestion and contact with eyes is recommended.

Wear safety glasses with sideshields.

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 7:	HANDLING AND STORAGE	
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Handling Procedures and Equipment:	Caution should be used to prevent against ingestion and contact with eyes. Handle with care to avoid breakage.
Storage Requirements:	Store in a cool, dry place. Avoid extremes in temperature.
Packaging:	USP Type 1 glass cartridges with rubber stopper and cap

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:		Occupational Exposure Limits (OEL)			
	Chemical Agent	ACGIH		Ontario	
	Agent	TWA⁵	STEL°	TWAb	STEL <sup>c</sup>
	Lidocaine Hydrochloride	Not available	Not available	Not available	Not available
	Epinephrine	Not available	Not available	Not available	Not available
<ul> <li>a – American Conference of Governmental Industri</li> <li>b – Time Weighted Average</li> <li>c - Short-term Exposure Limit</li> </ul>	al Hygienists				
Personal Protective Equipment (PPE):					
Gloves (specify):	Not normally	required			
Respiratory (specify):	Not normally	required			
Eye (specify):	Not normally	required			
Footwear (specify):	Not normally	required			
Other Equipment (specify):	RESUSCITATIVE EQUIPMENT AND DRUGS SHOULD BE AVAILABLE DURING DENTAL PROCEDURES				
Engineering Controls (e.g. ventilation, enclosed process, specify):	Not normally	required			

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Odour and Appearance:	Clear and odourless
Odour Threshold:	Not applicable
Specific Gravity (water=1):	1
Solubility in Water	Soluble
Co-efficient of Water/Oil Distribution:	Not available
Vapour Pressure:	17 mm Hg @ 20°C
Boiling Point (°C):	100°C

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Melting/Freezing Point (°C):	0°C
pH:	Not available
Vapour Density (Air=1):	0.6
Evaporation Rate (Butyl Acetate=1):	1
Flashpoint (°C) and Method:	Not flammable (water based)
Upper Flammable Limit (%):	Not available
Lower Flammable Limit (%):	Not available
Auto-ignition Temperature (°C):	Not available

	SECTION 10:	STABILITY AND REACTIVITY
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Stability:	Stable
Incompatible Materials:	Incompatible with compounds which react violently with water
Conditions of Reactivity:	None
Hazardous Decomposition Products:	None

# SECTION 11: TOXICOLOGICAL INFORMATION

Route of Entry:	
Irritancy to Product:	Not available
Synergistic Products:	Not available
Carcinogenicity:	This product has not been listed as a carcinogen or a potential carcinogen by the ACGIH, the International Agency for Research on Cancer (IARC), the US National Toxicology Program (NTP) or the US Occupational Safety and Health Administration (OSHA).
Reproductive Toxicity:	Not available
Teratogenicity:	No significant effects were observed on fetal development. However, animal studies have found that continuous exposure throughout pregnancy may decrease birth weight.
Mutagenicity:	Not available
Sensitivity to Product:	Not available
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# SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Not available
Persistence / Degradability:	Not available
Bioaccumulation / Accumulation:	Not available

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Mobility in Environmental Media:	Not available
Other Adverse Effects:	Not available

SECTION 13:	DISPOSAL CONSIDERATIONS	

Disposal: Observe all Federal/Provincial/S	State and Local disposal regulations.
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#### SECTION 14: TRANSPORTATION INFORMATION

Basic Shipping Description:	Not available
Additional Information:	Not available
Special Precautions:	Avoid temperature extremes. Prevent from freezing.

#### SECTION 15: REGULATORY INFORMATION

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.	
OSHA Regulatory Status:	Epinephrine is listed as a hazardous product in the RCRA (EPA) and CERCLA (EPA) regulations.
Regulatory Status:	This product is exempt from WHMIS as a drug product

#### SECTION 16: OTHER INFORMATION

Name of person or group that prepared MSDS:	Novocol Pharmaceutical in conjunction with a third party consultant
Phone #:	519-623-4800
MSDS Version#:	# 3 (replaces V.2 of March 9, 2007)

Information and statements contained in this document have been obtained from manufacturers, suppliers and recognized reference sources as provided to or obtained by Novocol Pharmaceutical of Canada, Inc.

Novocol Pharmaceutical of Canada, Inc. believes the information to be reliable but expressly disclaims any liability for providing such information and toxicology to our customers.

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 1:	PRODUCT AND COMPANY IDENTIFICATION
<u> </u>	
Product Name:	Lidocaine hydrochloride 2% and Epinephrine 1:50,000 Injection

Product Name:	Lidocaine hydrochloride 2% and Epinephrine 1:50,000 Injection Lidocaine hydrochloride 2% and Epinephrine 1:100,000 Injection
Brand Name:	OCTOCAINE® 50 (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)
	<b>LIGNOSPAN® FORTE</b> (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)
	OCTOCAINE® 100 (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)
	<b>LIGNOSPAN® STANDARD</b> (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)
Manufacturer / Supplier:	Septodont 25 Wolseley Court Cambridge, Ontario, Canada N1R 6X3 519-623-4800 http://www.septodont.com/
Prepared By:	Septodont in conjunction with a third party consultant
Emergency Phone Number:	(519) 623-4800 (Monday-Friday 08:30 to 16:30 EST)
Product Use:	Local anesthetic solution for use in peripheral nerve blocks
Date of Preparation:	July 11, 2016

SECTION 2:	HAZARDS IDENTIFICATION

Classification:	This product is exempt from WHMIS 2015 as a drug product. Information provided is for worker education and training purposes.			
	Equivalent Class: Specific Target Organ Toxicity – Single Exposure: Narcotic effects, Category 3			
Equivalent GHS Label Symbol:	<u>!</u>			
Hazard Statements:	Warning			
	H336 - May cause drowsiness or dizziness			
	May cause skin and/or eye irritation			
	Causes central nervous system effects such as drowsiness, confusion, excitability and nervousness. Acts as a depressant on the cardiovascular system.			
	Avoid use in individuals with hypersensitivities to amide-type anesthetics. Use with caution in individuals with diabetes and/or severe hypertension.			

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

	CONSULT PRODUCT INSERT FOR CLINICAL AND PHARMACOPIAL INFORMATION
	Signs and Symptoms of Overexposure: Drowsiness, confusion, excitability, nervousness, drop in blood pressure, fatigue, bluish discoloration of fingernails, lips, or skin, difficulties in breathing.
Precautionary Statements:	Prevention P261 – Do not breathe mist/vapours/spray P271 – Use in a well-ventilated area Response P304+P430 – If inhaled – remove victim to fresh air and keep at rest in a position comfortable for breathing P312 – Call a POISON CENTER or doctor/physician if you feel unwell Storage P405 – Store locked up Disposal P501 – Dispose of contents/container in accordance with local/provincial/federal regulations

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Concentration (Percent weight/weight)	CAS Number
Lidocaine Hydrochloride	2	137-58-6
Epinephrine Bitartrate	0.001 - 0.002	51-42-3

SECTION 4: FIRST AID MEASURES
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Inhalation:	Remove patient from exposure.
Eye Contact:	Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention, if irritation persists.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water
Ingestion:	Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison control or physician.
Personal Protective Equipment for First Aid Responders:	Wear impermeable gloves to avoid skin contact (e.g. nitrile, natural rubber).

SECTION 5:	FIRE FIGHTING MEASURES	
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Suitable extinguishing media:	Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials
Hazardous Combustion Products:	Not available

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Special Protective Actions for	As with all fires, evacuate personnel to a safe area. Firefighters should
Firefighters:	use self-contained breathing equipment and protective clothing.

SECTION 6:	ACCIDENTAL RELEASE MEASURES

Personal precautions:	Caution should be used to prevent against ingestion and contact with eyes. Wear safety glasses with side shields.		
Environmental precautions:	Prevent spills from entering sewers and watercourses. Cover drains.		
Methods and materials for containment and cleaning up:	Clean up spills with normal procedures used for non-hazardous liquids. This can include: absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly with water to remove residual contamination.		

#### SECTION 7: HANDLING AND STORAGE

Handling Procedures and Equipment:	Caution should be used to prevent against ingestion and contact with eyes.  Handle with care to avoid breakage.
Storage Requirements:	Store in a cool, dry place. Avoid extremes in temperature.
Packaging:	USP Type 1 glass with rubber stopper and cap
Sensitivity to Mechanical Impact:	No
Sensitivity to Static Discharge:	No

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:		Occupational Exposure Limits (OEL)			
	Chemical Agent	ACGIH <sup>a</sup>		Ontario	
		TWAb	STEL <sup>c</sup>	TWAb	STEL <sup>c</sup>
	Lidocaine Hydrochloride	Not available	Not available	Not available	Not available
	Epinephrine Bitartrate	Not available	Not available	Not available	Not available
a – American Conference of Governmental Industria	al Hygienists				

- b Time Weighted Average
- c Short-term Exposure Limit

C - Short-term Exposure Limit	
Personal Protective Equipment (PPE):	
Gloves (specify):	Not normally required
Respiratory (specify):	Not normally required
Eye (specify):	Not normally required

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

Footwear (specify):	Not normally required
Other Equipment (specify):	RESUSCITATIVE EQUIPMENT AND DRUGS SHOULD BE AVAILABLE DURING DENTAL PROCEDURES
Engineering Controls (e.g. ventilation, enclosed process, specify):	Not normally required

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Odour and Appearance:	Clear and odourless
Odour Threshold:	Not applicable
Specific Gravity (water=1):	1
Solubility in Water	Soluble
Co-efficient of Water/Oil Distribution:	Not available
Vapour Pressure:	17 mm Hg @ 20°C
Boiling Point (°C):	100°C
Melting/Freezing Point (°C):	0°C
pH:	Not available
Vapour Density (Air=1):	0.6
Evaporation Rate (Butyl Acetate=1):	1
Flashpoint (°C) and Method:	Not flammable (water based)
Upper Flammable Limit (%):	Not available
Lower Flammable Limit (%):	Not available
Auto-ignition Temperature (°C):	Not available
Decomposition Temperature (°C):	Not available

## SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Stable
Chemical Stability:	Stable
Conditions to Avoid:	None
Incompatible Materials:	Incompatible with compounds which react violently with water
Hazardous Decomposition Products:	None

## PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 11:	TOXICOLOGICAL INFORMATION
5	

Route of Entry:	Skin Contact  Skin Absorption  Eye Contact  Inhalation  Ingestion
Acute Toxicity:	Not expected to be acutely toxic.
	Acute measures of toxicity (i.e. LD50 and LC50) are not available for this mixture.
	LD50 for Lidocaine Hydrochloride: 317 mg/kg oral rat
	LD50 for Epinephrine Bitartrate: 4 mg/kg oral mouse
Skin Corrosion/Irritation:	May be irritating to the skin.
Serious Eye Damage/Irritation:	May be irritating to the eyes.
Respiratory or Skin Sensitization:	Not available
Interactive Effects:	Not available
Mutagenicity:	Not available
Carcinogenicity:	This product has not been listed as a carcinogen or a potential carcinogen by the ACGIH, the International Agency for Research on Cancer (IARC), the US National Toxicology Program (NTP) or the US Occupational Safety and Health Administration (OSHA).
Reproductive Toxicity:	No significant effects were observed on fetal development. However, animal studies have found that continuous exposure throughout pregnancy may decrease birth weight.
Specific Target Organ Toxicity – Single Exposure:	Causes central nervous system effects such as drowsiness, confusion, excitability and nervousness. Acts as a depressant on the cardiovascular system.
Specific Target Organ Toxicity – Repeated Exposure:	May cause hypersensitivity. Associated with the development of methemoglobinemia.
Aspiration Hazard:	Not available. Not expected to be of concern.

SECTION 12:	ECOLOGICAL INFORMATION	

Ecotoxicity:	Not available
Persistence / Degradability:	Not available
Bioaccumulation / Accumulation:	Not available
Mobility in Environmental Media:	Not available
Other Adverse Effects:	Not available

SECTION 13:	DISPOSAL CONSIDERATIONS
Disposal:	Observe all Federal/Provincial/State and Local disposal regulations.

#### PRODUCT ID: LIDOCAINE HYDROCHLORIDE AND EPINEPHRINE INJECTION

SECTION 14:	TRANSPORTATION INFORMATION
UN Number:	Not available
UN Proper Shipping Name:	Not available
Transport Hazard Classes:	Not available
Packing Group:	Not available
Environmental Hazards:	Not available
Special Precautions for User:	Avoid temperature extremes. Prevent from freezing.

SECTION 15:	REGULATORY INFORMATION
OSHA Regulatory Status:	Epinephrine bitartrate (epinephrine salt) is <u>not</u> listed as a hazardous product in the RCRA (EPA) and CERCLA (EPA) regulations.
Regulatory Status:	This product is exempt from current WHMIS legislation as a drug product

SECTION 16:	OTHER INFORMATION
Name of person or group that prepared SDS:	Septodont in conjunction with a third party consultant
Phone #:	519-623-4800

# 5 (replaces V.4 of July 19, 2013)

Information and statements contained in this document have been obtained from manufacturers, suppliers and recognized reference sources as provided to or obtained by Septodont.

Septodont believes the information to be reliable but expressly disclaims any liability for providing such information and toxicology to our customers.

SDS Version#: