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:	2% XYLOCAINE™ DENTAL with epinephrine 1:50,000 (Lidocaine Hydrochloride 2% and Epinephrine 1:50, 000 Injection)		
	2% XYLOCAINE™ DENTAL with epinephrine 1:100,000 (Lidocaine Hydrochloride 2% and Epinephrine 1:100, 000 Injection)		
Manufacturer / Supplier:	DENTSPLY Pharmaceutical 1301 Smile Way York, PA, USA 1-800-989-8825 http://www.dentsply.com		
Prepared By:	Novocol Pharamceutical in conjunction with a third party consultant		
Emergency Phone Number:	1-416-522-3854		
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

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Concentration	CAS Number	LD ₅₀	LC ₅₀
	(Percent			

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	weight/weight)			
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
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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.

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.

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.

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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 ^a		Ontario	
	/ igoni	TWA ^b	STEL ^c	TWA ^b	STEL ^c
	Lidocaine Hydrochloride	Not available	Not available	Not available	Not available
	Epinephrine	Not available	Not available	Not available	Not available
a – American Conference of Governmental Industria b – Time Weighted Average c - Short-term Exposure Limit	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
Melting/Freezing Point (°C):	0°C
pH:	Not available
Vapour Density (Air=1):	0.6
Evaporation Rate (Butyl Acetate=1):	1

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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
Mobility in Environmental Media:	Not available

Not available

Other Adverse Effects:

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SECTION 13:	DISPOSAL CONSIDERATIONS
Disposal:	Observe all Federal/Provincial/State and Local disposal regulations
SECTION 14:	TRANSPORTATION INFORMATION
Basic Shipping Description:	Not available
Additional Information:	Not available Not available
Special Precautions:	Avoid temperature extremes. Prevent from freezing.

SECTION 15:	REGULATORY INFORMATION	

	ct has been classified in accordance with the hazard criteria of the Controlled Products Regulations SDS 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:	Environmental Health & Safety
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.

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