PRODUCT ID: PHENTOLAMINE MESYLATE INJECTION

SECTION 1:	PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Phentolamine Mesylate Injection, 0.235 mg/mL		
Manufacturer:	Novocol Pharmaceutical of Canada, Inc. 25 Wolseley Court Cambridge, ON N1R 6X3 519-623-4800 http://www.septodont.com/		
Emergency Phone Number:	ChemTel LLC (800)255-3924 (North America) +1 (813)248-0585 (International)		
Product Use:	Adrenergic blocker used to reverse the effects of local anesthesia.		
Date of Preparation:	July 14. 2021		

Classification:	This product is exempt from WHMIS 2015 as a drug product. Information provided is for worker education and training purposes. Not classifiable according to GHS		
GHS Label Symbol:	None		
Hazard Statements:	May cause skin and/or eye irritation		
	Can cause central nervous system effects such as dizziness and weakness. Stimulates the gastrointestinal tract, potentially resulting in gastric secretion, nausea, vomiting, diarrhea. Acts as a depressant (by vasodilation) on the cardiovascular system, with potential effects including hypotension (lowering of blood pressure), tachycardia (abnormal heart rhythm).		
	Avoid exposure to individuals with hypersensitivity to phentolamine.		
	CONSULT PRODUCT INSERT FOR CLINICAL AND PHARMACOPIAL INFORMATION		
	Signs and Symptoms of Overexposure: Drop in blood pressure, tachycardia, cardiac stimulation, dizziness, excitability, headache.		
Precautionary Statements:	Response P312 – Call a POISON CENTER or doctor/physician if you feel unwell Disposal P501 – Dispose of contents/container in accordance with local/provincial/federal regulations		

PRODUCT ID: PHENTOLAMINE MESYLATE INJECTION

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Concentration (Percent weight/weight)	CAS Number
Phentolamine mesylate	0.0235	65-28-1
d-Mannitol	5	69-65-8
Sodium acetate	0.136	127-09-3
Ethylenediaminetetraacetic acid-Na ₂	0.05	139-33-3

SECTION 4: FIRST AID MEASURES

Inhalation:	Remove person 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:	Wash skin with soap and water		
Ingestion:	Flush mouth with water and get immediate medical attention. Induce vomiting only if patient is conscious. Never attempt to induce vomiting in an unconscious person.		
Injection:	Get immediate medical attention.		
Personal Protective Equipment for First Aid Responders:	Wear impermeable gloves to avoid skin contact (e.g. nitrile, natural rubber).		

SECTION 5: FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials
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

Personal precautions:	Take precautions to avoid skin (i.e. protective gloves, long sleeves, etc.) and eye contact (i.e. wear safety glasses with side shields) and ingestion.
Environmental precautions:	Prevent spills from entering sewers and watercourses. Cover drains.

PRODUCT ID: PHENTOLAMINE MESYLATE INJECTION

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
and ordaning up.	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 skin and eyes. Handle with care to avoid breakage.
Storage Requirements:	Store between 20-25°C (68-77°F). Excursions of 15-30°C (59-86°F) are permitted. Protect from direct heat and light. Do not permit to freeze.
Packaging:	Glass dental cartridges designed to deliver 1.7 mL of solution per cartridge
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 ^a		Ontario	
	Agent	TWAb	STEL ^c	TWAb	STEL ^c
	Phentolamine Mesylate	Not available	Not available	Not available	Not available
	d-Mannitol	Not available	Not available	Not available	Not available
	Sodium Acetate	Not available	Not available	Not available	Not available
	Ethylenediami netetraacetic acid-Na ₂	Not available	Not available	Not available	Not available

- a American Conference of Governmental Industrial Hygienists b Time Weighted Average

c - Short-term Exposure Limit	
Personal Protective Equipment (PPE):	
Gloves (specify):	Impermeable gloves (e.g. nitrile, natural rubber)
Respiratory (specify):	Not normally required
Eye (specify):	Safety glasses with side shields or googles if a splash hazard exists
Footwear (specify):	Not normally required
Clothing (specify):	Wear clothing to prevent skin contact, as necessary (e.g. lab coat with closed front and sleeves)
Other Equipment (specify):	Resuscitative equipment and drugs should be available during dental procedures

PRODUCT ID: PHENTOLAMINE MESYLATE INJECTION

Engineering Controls (e.g. ventilation, enclosed process, specify):	Not normally required
5.15.555 p. 55555, 5p. 5.17).	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Odour and Appearance:	Clear,colourless solution
Odour Threshold:	Not available
Specific Gravity (water=1):	Not available
Solubility in Water	Soluble
Co-efficient of Water/Oil Distribution:	Not available
Vapour Pressure:	Not available
Percent Volatile:	0%
Boiling Point (°C):	Not available
Melting/Freezing Point (°C):	Not available
pH:	4.0
Vapour Density (Air=1):	Not available
Evaporation Rate (Butyl Acetate=1):	Not available
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: PHENTOLAMINE MESYLATE INJECTION

	SECTION 11:	TOXICOLOGICAL INFORMATION
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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.
	LD50s for Phentolamine Mesylate: 1250 mg/kg oral-rat; 1100 mg/kg oral-mouse; No Observed Adverse Effect Level (NOAEL) 75 mg/kg oral-rat
	LD50s for d-Mannitol: 13,500 mg/kg oral-rat; 22,000 mg/kg oral-mouse
	LD50 for Sodium Acetate: 3,500 mg/kg oral-rat; 6,900 mg/kg oral-mouse; LC50 greater than 30/mg/L rat
	LD50 for Ethylenediaminetetraacetic acid-Na ₂ : 2000 mg/kg oral-rat; 2050 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 mutagenic in the Ames assay.
Carcinogenicity:	This product and its ingredients have 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). A published report of a single two-year rat carcinogenicity study of orally administered phentolamine mesylate stated that chronic treatment with doses of 10, 50 and 150 mg/kg reduced survival and induced the development of hibernomas in a non dose-related fashion. The frequencies of pituitary gland and liver adenomas were statistically increased in treated rats but the compound is not listed as a known carcinogen.
Reproductive Toxicity:	No evidence of impaired fertility was observed in male rats at doses up to 150 mg/kg. No evidence of teratogenic effects.
Specific Target Organ Toxicity – Single Exposure:	Not available
Specific Target Organ Toxicity – Repeated Exposure:	Not available
Aspiration Hazard:	Not available. Not expected to be of concern.

SECTION 12:	ECOLOGICAL INFORMATION

Ecotoxicity:	Not available
LCOTOXICITY.	Not available

PRODUCT ID: PHENTOLAMINE MESYLATE INJECTION

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

Disposal: Observe all Federal/Provincial/State and Local disposal regulations

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:	Phentolamine mesylate is not a DOT hazardous substance according to 49 CFR 172.101. Phentolamine mesylate is not a Marine Pollutant.
Special Precautions for User:	Avoid temperature extremes. Prevent from freezing.

SECTION 15: REGULATORY INFORMATION

OSHA Regulatory Status:	Phentolamine mesylate is not listed as a hazardous product in the SARA, RCRA and CERCLA regulations.
Regulatory Status:	This product is exempt from current WHMIS legislation as a drug product

SECTION 16: OTHER INFORMATION

- 1. This SDS does not address therapeutic use of this material.
- 2. Use of this product should be through the direction of a dentist.
- 3. Persons administering this drug to patients must be careful to avoid needle sticks from syringes used in the administration. All needle sticks must be reported to your management.

SDS Version#: # 6 (replaces V.5 of July 11, 2016)

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.