MATERIAL SAFETY DATA SHEET

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Section I - IDENTITY

Trade Name: REVERTIDINETM **Common:** Atipamezole hydrochloride 5 mg/mL; 10 mL multiple doses **Chemical Names:** 4-(2-ethyl-2,3-dihydro-1H-inden-2-yl)-1H-imidazole hydrochloride **Synonyms:** Atipamezole hydrochloride **Date Prepared:** January 9, 2019

Section II - COMPOSITION/INFORMATION ON INGREDIENTS

Component	%	CAS#
Atipamezole hydrochloride	0.5	104075-48-1
Methylparaben	0.01	99-76-3
Sodium chloride	0.85	7647-14-5
Water for Injection	98.64	7732-18-5

Section III - HAZARDS IDENTIFICATION

CERCLA ratings (scale 0-3) NFPA ratings (scale 0-4) Signal word Statements of hazard	Health=1 Fire=0 Reactivity=0 Health=1 Fire=0 Reactivity=0 CAUTION! MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.	
Eye		
Short term effects	May cause eye irritation. Signs and symptoms might include redness, swelling, blurred vision or pain.	
Long term effects	None known; see short-term effects above.	
Skin		
Short term effects	May cause skin irritation and allergic skin reactions following direct or repeated contact with this material.	
Long term effects	None known; see short term-effects above.	
Inhalation		
Short term effects	May cause mucous membrane and respiratory tract irritation. May cause central nervous system effects. May also cause hypersensitivity reactions in susceptible individuals.	
Long term effects	Not known; see short-term effects above.	
Ingestion		

Short term effects	Ingestion of this material may cause effects similar to those
	seen in animal studies including effects on nervous system and
	respiratory system
Long term effects	Not known; see short-term effects above.

Section IV - FIRST AID MEASURES

Eyes	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin	Wash skin with soap and plenty of water. Remove contaminated clothing and shoes. Wash clothing and thoroughly clean shoes before reuse. If irritation occurs or persists, get medical attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
Ingestion	If swallowed, get medical attention immediately. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person.

Section V - FIRE FIGHTING MEASURES

General hazard	Toxic or corrosive emissions may be given off in a fire. See Hazardous combustion products, below, and Hazardous decomposition products in Section 10 - STABILITY AND REACTIVITY.
Fire fighting instructions	Wear approved positive pressure, self contained breathing apparatus and full protective turn out gear. Use caution in approaching fire.
Extinguisher to use	Use carbon dioxide, dry chemical, or water spray.
Hazardous combustion	Emits toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and other chlorine-contaminating compounds.
Flash point	Emits toxic fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen chloride and other chlorine-containing compounds.
Autoignition	Not known
Minimum explosive concentration for dust/vapor products	Not known
Flammability limits	Not known

Section VI - ACCIDENTAL RELEASE MEASURES

Occupational spill Contain the source of the spill or leak. Absorb spills with noncombustible absorbent material and transfer to labeled container for treatment and disposal. Clean spill area thoroughly with detergent and water.

Clean up - large spill Review Sections 3 and 8 before proceeding with clean up. Contain the source of the spill or leak. Dike or pump spilled material into a labeled recovery container or absorb with non-combustible material. Put saturated absorbent material into a labeled container. Close container and move it to a secure holding area. Clean spill area thoroughly with detergent and water.

Collect wash water with a non-combustible absorbent material and transfer to labeled container for treatment and disposal.

Section VII - HANDLING AND STORAGE

General handling Keep away from heat. Use with adequate ventilation. Do not get in eyes. Avoid prolonged or repeated contact with skin and clothing. Avoid breathing vapor or mist. When handling, use proper personal protective equipment specified in Section 8. Wash thoroughly after handling. **Storage** Store out of direct sunlight in a well ventilated area at ambient temperature. **Temperature range** 15 - 30 °C

Section VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Atipamezole hydrochloride Not established
No Occupational Exposure Limit (OEL) established for this mixture or
the active ingredient it contains.
General room ventilation is adequate unless the process generates
airborne mist or vapor.
None required under normal and foreseeable conditions of use.
None required under normal and foreseeable conditions of use.
Rubber gloves are recommended if there is a potential for contact.
Under normal conditions of use, respiratory protection is not expected to be necessary. Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure.

Section IX - PHYSICAL AND CHEMICAL PROPERTIES

Physical form	Liquid
Color	Colorless.
Clarity	Clear
Odor	Odorless.
Molecular weight	Not applicable
Molecular formula	Not applicable
рН	Not known
Melting point	Not known
Pour point	Not known
Vapor pressure	Not known
Water solubility	Soluble in water
Solvent solubility	No data available

Section X - STABILITY AND REACTIVITY

Reactivity	
Conditions to avoid	
Incompatibilities	

Stable. Avoid excessive exposure to light. None known. Hazardous decomposition products

Hazardous polymerization Oxidizing properties Explosive properties No data available. See Section 5 - under Hazardous combustion products. Will not occur. No data available. None known or expected.

Section XI - TOXICOLOGICAL INFORMATION

Acute toxicity	Туре	Route	Species	Dosage	
	LD50	Oral	Rat	80 mg/kg	
Eye	No data avail	able. See Sectio	on 3 - HAZARD IDEN	NTIFICATION, above.	
Skin	No data avail	No data available. See Section 3 - HAZARD IDENTIFICATION, above.			
Inhalation	No data avail	No data available. See Section 3 - HAZARD IDENTIFICATION, above.			
Ingestion	Acute oral LI	050s for the act	ive ingredient are liste	ed above in the table. While	
	this formulati	on has not been	tested as a whole, it v	would not be expected to be	
	toxic orally b	toxic orally based on the amount of active ingredient in the mixture.			
Mutagenicity	y No data available.				
Subchronic effects	No data available.				
Chronic toxicity	See Chronic effects/Carcinogenicity below.				
Chronic effects/Carcinogenicity No 1		No long-term	No long-term toxicity studies have been conducted to evaluate		
		the chronic to	xicity or carcinogenic	potential of this material.	
OSHA carcir	nogen	No			
NTP carcino	gen	Not classified			
IARC carcinogen		Not classified			
Reproductive effects	s No data avail	able.			
Teratogenicity No data available.					
At increased risk from	om exposure	Individuals w	ith cardiac conditions	may be more susceptible	
		to toxicity in	cases of overexposure		

Section XII - ECOLOGICAL INFORMATION

Environmental overview The use and/or disposal of this material, its metabolites and degradation products is not expected to cause adverse effects upon animals, plants, humans, other organisms, or the environment.

Section XIII - DISPOSAL INFORMATION

Disposal procedure Incineration is the recommended means of disposal for this material. This material may also be disposed in landfills. Federal, State, Local environmental regulations and Site conditions may affect proper disposal options.

Section XIV - TRANSPORTATION INFORMATION

Proper shipping name	Atipamezole hydrochloride sterile injectable solution
General shipping instruction	Non-regulated

Section XV - REGULATORY INFORMATION

No No No
No

Section XVI - OTHER DATA

- 1. Use of this product should be through or under the direction of a veterinarian.
- 2. This MSDS does not address therapeutic use of this material.

The information provided is believed to be complete and accurate. It is the user's responsibility to use the information according to their application. Modern Veterinary Therapeutics, LLC assumes no additional liability or responsibility resulting from the use of or reliance on this information.