

#### **SECTION 1: PRODUCT IDENTIFICATION**

PRODUCT NAME	BUPIVACAINE HYDROCHLORIDE, USP (Monohydrate)
PRODUCT CODE	0524
SUPPLIER	MEDISCA Inc.   Tel.: 1.800.932.1039   Fax.: 1.855.850.5855   661 Route 3, Unit C, Plattsburgh, NY, 12901   6641 N. Belt Line Road, Suite 130, Irving, TX, 75063   MEDISCA Pharmaceutique Inc.   Tel.: 1.800.665.6334   Fax.: 514.338.1693   4509 Rue Dobrin, St. Laurent, QC, H4R 2L8   21300 Gordon Way, Unit 153/158, Richmond, BC V6W 1M2   MEDISCA Australia PTY LTD   Tel.: 1.300.786.392   Fax.: 61.2.9700.9047   Unit 7, Heritage Business Park   5-9 Ricketty Street, Mascot, NSW 2020
EMERGENCY PHONE	CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 NSW Poisons Information Centre: 131 126 National Chemical Emergency Centre 44(0)1235239670
RECOMMENDED USES	Manufacturing and Compounding
RESTRICTIONS ON USE	Not applicable

## SECTION 2: HAZARDS IDENTIFICATION

#### GHS CLASSIFICATION

PICTOGRAM

SIGNAL WORD HAZARD STATEMENT(S)

ADVERSE PHYSIOCHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS Acute Toxicity - Oral (Category 2) Specific Target Organ Toxicity - Single Exposure (Category 3) - Narcotic Effect Acute Aquatic Toxicity (Category 3)



Danger

Fatal if swallowed. Fatal if in contact with skin. Fatal if inhaled. Avoid contact with skin and eyes. May damage fertility or the unborn child. May cause drowsiness or dizziness. May cause allergic reaction Harmful to aquatic life. May cause long lasting harmful effects to aquatic life. Not Applicable



PRECAUTIONARY STATEMENT(S)	Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
	Response	<ul><li>IF SWALLOWED: Immediately call a poison center. Get emergency medical help immediately. Rinse mouth.</li><li>IF EXPOSED OR CONCERNED: Get medical advice/attention.</li><li>IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.</li></ul>
	Storage	Store in a well ventilated place. Keep container tightly closed. Store locked up.
	Disposal	Dispose of contents and/or container in accordance with local regulations.
HMIS CLASSIFICATION	Health Hazard	3 Flammability 1
	Reactivity	0 Personal Protection G

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	(+/-)-1-Butyl-2',6'-pipecoloxylidide monohydroch	nloride, monohydrate		
BOTANICAL NAME	Not applicable			
SYNONYM	Not applicable			
CHEMICAL FORMULA	C18H28N2O.HCI H2O			
CHEMICAL FAMILY	Piperidine derivative; amino amide			
CAS NUMBER	14252-80-3			
ALTERNATE CAS NUMBER	73360-54-0			
MOLECULAR WEIGHT	342.9079			
COMPOSITION	CHEMICAL NAME	CAS NUMBER	EC NUMBER	% BY WEIGHT
	BUPIVACAINE HCI (Monohydrate)	14252-80-3	627-065-3	100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

### SECTION 4: FIRST-AID MEASURES

IN CASE OF EYE CONTACT	Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.
IN CASE OF SKIN CONTACT	Wash with soap & water for 15 minutes. Cover the irritated skin with an emollient. If irritation persists seek medical aid.
IF SWALLOWED	Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.
IF INHALED	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.



MEDICAL ATTENTION AND SPECIAL TREATMENT

Get emergency medical help.

SYMPTOMS CAUSED BY EXPOSURE

Not expected to present a significant hazard under anticipated conditions of normal use.

### SECTION 5: FIREFIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Emits toxic and corrosive fumes of CO, CO<sub>2</sub>, NO<sub>x</sub>, HCI and unburnt organic and degradation products.

FLAMMABLE PROPERTIES

HAZARDOUS COMBUSTION PRODUCTS

SUITABLE & UNSUITABLE **EXTINGUISHING MEDIA** 

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

May be combustible at high temperature

Under fire conditions, hazardous fumes will be present.

Small fire: dry chemical, CO2 or water spray. Large fire: dry chemical, CO2, alcohol resistant foam or water spray. Do not get water inside containers.

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.			
METHODS & MATERIAL FOR CONTAINMENT	On land, sweep or shovel into suitable containers. Minimize generation of dust.			
CLEANUP PROCEDURE	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.			
REFERENCE TO OTHER SECTIONS	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.			

### **SECTION 7: HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING	Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.
CONDITIONS FOR SAFE STORAGE	Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Preserve in well-closed containers. Protect from light. Ground all equipment containing material.
STORAGE CONDITIONS	Store in original container, tightly sealed, protected from direct sunlight and moisture. Short term excursions, temperature excursions as experienced during shipping and warehousing, up to 40°C are acceptable.



### SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical	Name: BUPIVACA	INE HCI (Mo	nohydrate)	CAS #: 142	52-80-3				
	Country	Limit valu	ue-8 hours	Limit value	-Short Term	IDLH	REL	Advisory	Notes
		ppm	mg/m³	ppm	mg/m³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
HSE	UK	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
GESTIS	N/A	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

N/L = Not listed ; N/A = Not Available

PELs are 8-hour TWAs = Limit value - Eight hours

Ceiling or Short-Term TWA = STEL = Limit value - Short term

#### EXPOSURE GUIDELINES

Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m<sup>3</sup>

PERSONAL PROTECTIVE EQUIPMENTEyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's<br/>eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate<br/>gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin.<br/>Respirators: Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard<br/>EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are<br/>exceeded or if irritation or other symptoms are experienced. Thermal Hazards: For products representing a<br/>thermal hazard, appropriate Personal Protective Equipment should be used.SPECIFIC ENGINEERING CONTROLSAdequate mechanical ventilation. Fumehood, eye wash station, and safety shower.BIOLOGICAL MONITORINGNot availableCONTROL BANDINGNot available

NOTES

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

USP: ELV, industrial: TWA: 0.05 mg/m<sup>3</sup> STEL: 0.5 mg/m<sup>3</sup>

PHYSICAL STATE	Solid				
DESCRIPTION	White, odorless, crysta	White, odorless, crystalline powder.			
SOLUBILITY	Freely soluble in water	Freely soluble in water and in alcohol; slightly soluble in chloroform and in acetone.			
ODOR	Odorless				
FLAMMABILITY	May be combustible at high temperature				
AUTO-IGNITION TEMPERATURE	Not available	BOILING POINT	423.4°C, 794.12°F	DECOMPOSITION TEMPERATURE	(248 - 259)°C, (478.4-498.2)°F



EVAPORATION RATE	Not available	EXPLOSIVE LIMIT	Not available	FLASH POINT	209 °C, 408.2 °F
log P (OCTANOL-WATER)	2.59 (20°C)	LOWER FLAMMABLE/ EXPLOSIVE LIMIT(S)	Not available	MELTING/FREEZING	(248 - 259)°C, (478.4-498.2)°F (decomposes)
PARTICLE CHARACTERISTICS	Not available	OXIDIZING PROPERTY	Not available	рH	4.5 - 6.0 (1%)
RELATIVE DENSITY (WATER = 1)	Not available	SPECIFIC GRAVITY	1.03 - 1.04	UPPER FLAMMABLE/ EXPLOSIVE LIMIT(S)	Not available
VAPOR DENSITY (AIR = 1)	Not available	VAPOR PRESSURE	Not available	VISCOSITY	Not available

The physical data presented above are typical values and should not be construed as a specification.

### SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	Not established
CHEMICAL STABILITY	Stable under recommended storage conditions
INCOMPATIBLE MATERIALS	Strong oxidants, Strong acids, Methyl vinyl ether, Strong bases, Bases, Zinc.
HAZARDOUS DECOMPOSITION PRODUCTS	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride, unburnt organic degradation products and other gases may occur
HAZARDOUS POLYMERIZATION	Will not occur
POSSIBLITY OF HAZARDOUS REACTION	Not established
CONDITIONS TO AVOID	Moisture, sunlight and extreme temperatures

### SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	Oral: Rat: LD50: (mg/kg): 18 Dermal: Rabbit LD50: (mg/kg): 1100 mg/kg Inhalation: Rat: LC50: (mg/L/4hr): Not available
SKIN CORROSION/IRRITATION	Due to lack of data the classification is not possible.
SERIOUS EYE DAMAGE/EYE IRRITATION	Due to lack of data the classification is not possible.
RESPIRATORY SENSITIZATION	Due to lack of data the classification is not possible. By analogy to other local anesthetics, allergic reactions are possible with cross-sensitivity with amide-type anesthetics.
SKIN SENSITIZATION	Due to lack of data the classification is not possible. By analogy to other local anesthetics, allergic reactions are possible with cross-sensitivity with amide-type anesthetics.
GERM CELL MUTAGENICITY	Due to lack of data the classification is not possible.
CARCINOGENICITY	OSHA BUPIVACAINE HCI (Monohydrate) is not listed.



NT	NTP	BUPIVACAINE HCI (Monohydrate) is not listed.	
	IARC	BUPIVACAINE HCI (Monohydrate) has not been evaluated.	
	California Proposition 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.	
ADDITIONAL CARCINOGENICITY	Due to lack of da	ta the classification is not possible.	
REPRODUCTIVE TOXICITY	Based on available data, the classification criteria are not met. Decreased pup survival in rats and embryocidal effect in rabbits have been observed when bupivacaine hydrochloride was administered to these species in doses comparable to nine and five times, respectively, the maximum recommended daily human dose (400mg)		
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Narcotic Effect		
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Due to lack of da	ta the classification is not possible.	
ASPIRATION HAZARDS	Based on availab	le data, the classification criteria are not met.	
SIGNS AND SYMPTOMS OF EXPOSURE	Based on available data, the classification criteria are not met. ROUTES OF EXPOSURE: Oral, Dermal, Inhalation, Eye contact EARLY ONSET SYMPTOMS RELATED TO EXPOSURE: Not available DELAYED HEALTH EFFECT FROM EXPOSURE: Low blood pressure. Slow heartbeat. Irregular heartbeat. Ringing in ears. Seizures. Unconsciousness. Cardiad arrest. Coma. Death. Symptoms related to the physical, chemical, and toxicological characteristics: Dizziness. Nervousness. Restlessness. Nausea. Vomiting. Blurred vision. Burning or tingling sensations. Tremor. Drowsiness. Disorientation. Difficulty breathing. Cross sensitivity: Persons sensitive to one amide-type local anesthetic may be sensitive to this material also. Medical conditions aggravated by exposure: Heart problems. Impaired liver function.		
		o electrical defibrillation and a successful outcome may require prolonged resuscitative efforts.	
POTENTIAL HEALTH EFFECTS	Inhalation	Fatal if inhaled. Causes respiratory tract irritation.	
	Ingestion	Fatal if swallowed.	
	Skin	Fatal if absorbed through skin. Causes skin irritation	
	Eyes	Causes eye irritation.	

## SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	EC50: 48 Hr: Crustacea: (mg/L): 39 LC50: 96 Hr: Fish: (mg/L): Not available EC50: 72 or 96 Hr: Algae (or other aqua plants): (mg/L): Not available
PERSISTENCE AND DEGRADABILITY	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are more toxic.
BIOACCUMULATIVE POTENTIAL	Moderate: LogPow: 2.59 (20°C)
MOBILITY IN SOIL	Freely soluble in water
OTHER ADVERSE EFFECTS	Not available



This product is not intended to be released into the environment

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**DISPOSAL METHODS** 

Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.

#### **SECTION 14: TRANSPORT INFORMATION**

UN PROPER SHIPPING NAME	TOXIC SOLID, ORGANIC, N.O.S.
UN NUMBER	2811
CLASS	6.1
PACKING GROUP	П
AUSTRALIA	
HAZCHEM	2X
EU TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE	Not Listed
ENVIRONMENTAL HAZARDS	Not available
SPECIAL SHIPPING INFORMATION	Not applicable

#### UNITED STATES REGULATIONS

Chemical Name & CAS	CERCLA 40 CFR Part 302.4	SARA (Title III) 40 CFR Part 372.65	EPA 40 CFR Part 355 Appendix A Appendix B		Pennsylvania	California Prop 65		
BUPIVACAINE HCI, 14252-80-3	N/L	N/L	N/L	N/L	N/L	N/L	N/L	N/L

**SECTION 15: REGULATORY INFORMATION** 

N/L = Not Listed; X = Listed

#### AUSTRALIAN REGULATIONS

Chemical Name & CAS	Poisons and Therapeutic Goods	Therapeutic Goods Act	Code of Practices - Illicit Drug Precursors	Poisons Standard	Work Health and Safety Regulations	Inventory of Industrial Chemcials
BUPIVACAINE HCI, 14252-80-3	N/L	Listed as Schedule 4*	N/L	Listed*	N/L	N/L

N/L = Not Listed

#### EU REGULATIONS



Chemical Name & CAS	REACH ANNEX XVII	REACH ANNEX XIV	EC 1005/2009	EC 850/2004	EC 1107/2009	PIC - Prior Informed Consent Regulation	EC 2012/18
BUPIVACAINE HCI, 14252-80-3	N/L	N/L	N/L	N/L	N/L	N/L	N/L
N/L = Not Listed; X = Listed							
Any EU regulation not listed above	e is not applicabl	e to this product.					
SUBJECT TO INTERNATIONAL	N	lot applicable					
NOTES	*I	_isted as the base					
	;	SECTION 1	6: OTHER I	NFORMAT	ION		
REFERENCES	A	vailable upon requ	est				
ABBREVIATIONS AND ACRONY	H ir 5 M S I I C H R E	ygiene Association dustrial chemical \$ comprehensive Env 0%; <b>EPA</b> – Enviror laterials Informatio ystem; <b>IARC</b> – Inte <b>RFMN</b> – Ready Bio <b>D50</b> – Lethal Dose occupational Safety lealth Administratic recommended Exp	Workplace Enviro Substances Accord rironmental Respont mental Protection n System; <b>HSE</b> – Hernational Agency fr degradability Mode , 50%; <b>MSHA</b> - Mir r and Health; <b>NTP</b> - n Permissible Expro- soure Limit; <b>SARA</b> 7 – Threshold Limit	nment Exposure I ing to Regulations ase, Compensatio Agency; <b>GHS</b> – G lealth and Safety I or Research on Ca or Research	evels; CAESAR – ;; CAS – Chemical n, and Liability Act lobal Harmonized Executive; HSIS – ancer; IDLH - Imm superiore Sanità; L Ith Administration; pgy Program; OSH R – Quantitative S ndments and Rea	A WEEL – American I Computer Assisted E Abstract Service; CE ;; EC50 – Effective Co System; HMIS – Haza Hazardous Substanc ediately Dangerous to C50 – Lethal Concen NIOSH – National Ins IA PEL – Occupationa tructure-activity relation uthorization Act; STEI age; WHMIS – Workpl	Evaluation of <b>RCLA</b> – ncentration, ardous es Information b Life or Health tration, 50%; stitute for al Safety & ponship; <b>REL</b> - – Short Term
LAST REVISION	0	2/2023					
SUPERSEDES	F	05/2021 For a list of changes to the SDS since the last version, please communicate with MEDISCA at www.medisca.com					
DISCLAIMER	ii T F ti	This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. The a information is believed to be correct but does not purport to be all inclusive and shall be used only as a gui. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact wit above product. Recipients of the product must take responsibility for observing existing laws and regulation.					
SUPPLEMENTARY INFORMATIC		For all country specific requirements not outlined on this Safety Data Sheet, please request Supplementary Page to this Safety Data Sheet.					