

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME	ACETAZOLAMIDE, USP
PRODUCT CODE	0410
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 PRECAUTIONARY STATEMENT(S) Eye Irritation (Category 2A) Skin Irritation (Category 2) Toxic to Reproduction (Category 2)



Warning

Causes serious eye irritation. Causes skin irritation. Suspected of damaging fertility or the unborn child. Not Applicable.

Prevention

Wash hands thoroughly after handling. Do not touch eyes. Obtain, read and follow all special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye and face protection and hearing protection.



	Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical help. IF ON SKIN (HAIR): Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF EXPOSED OR CONCERNED: Get medical advice/attention.					p.	
	Storage	Store locked up.						
	Disposal	Dispose of contents and/or container in accordance with local regulations.						
HMIS CLASSIFICATION	Health Hazard		2		Flammability	0		
	Reactivity		0		Personal Protection	E		

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	Acetamide, N-[5-(aminosulfonyl) -1,3,4-thiad	iazol-2-yl]		
BOTANICAL NAME	Not applicable			
SYNONYM	Not applicable			
CHEMICAL FORMULA	C4H6N4O3S2			
CHEMICAL FAMILY	Sulfonamide			
CAS NUMBER	59-66-5			
ALTERNATE CAS NUMBER	Not applicable			
MOLECULAR WEIGHT	222.2484			
COMPOSITION	CHEMICAL NAME	CAS NUMBER	EC NUMBER	% BY WEIGHT
	ACETAZOLAMIDE	59-66-5	200-440-5	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. 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

Not applicable



FLAMMABLE PROPERTIES

May be combustible at high temperature.

HAZARDOUS COMBUSTION PRODUCTS

SUITABLE & UNSUITABLE EXTINGUISHING MEDIA

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

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	Wear respiratory protection. 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. 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.
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.
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	Chemical Name: ACETAZOLAMIDE CAS #: 59-66-5								
	Country	Limit value-8 hours		rs 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	Add Country	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A

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

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/m³

PERSONAL PROTECTIVE EQUIPMENT	Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Thermal Hazards: For products representing a thermal hazard, appropriate Personal Protective Equipment should be used.					
SPECIFIC ENGINEERING CONTROLS	Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.					
BIOLOGICAL MONITORING	Not available					
CONTROL BANDING	Not available					

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Solid										
DESCRIPTION	White	White to faintly yellowish white, crystalline, odorless powder.									
SOLUBILITY	Very	slightly soluble in wa	ater; s	sparingly soluble in practically I	boiling water; slightly	soluble in a	Icohol.				
ODOR	Odor	less									
FLAMMABILITY	May I	be combustible at hi	gh te	mperature							
AUTO-IGNITION TEMPERATURE		Not available		BOILING POINT	Not available		OMPOSITION PERATURE	(258-259)°C, (496.4-498.2)°F			
EVAPORATION RATE		Not available		EXPLOSIVE LIMIT	Not available	FLAS	SH POINT	Not available			
log P (OCTANOL-WATER)		-0.26		LOWER FLAMMABLE/ EXPLOSIVE LIMIT(S)	Not available	MEL ⁻ POIN	TING/FREEZING IT	(258-259)°C, (496.4-498.2)°F (decomposes)			
PARTICLE CHARACTERISTICS		Not available		OXIDIZING PROPERTY	Not available	рН		4.0 - 6.0			
RELATIVE DENSITY (WATER = 1)		Not available		SPECIFIC GRAVITY	Not available		ER FLAMMABLE/ .OSIVE LIMIT(S)	Not available			
VAPOR DENSITY (AIR = 1)		Not available		VAPOR PRESSURE	4.09 mmHg	VISC	OSITY	Not available			

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



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						
HAZARDOUS DECOMPOSITION PRODUCTS	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides 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): >15000 Dermal: Rabbit LD50: (mg/kg): Not available Inhalation: Rat: LC50: (mg/L/4hr): Not available				
SKIN CORROSION/IRRITATION	Causes skin irrita	ation (pH: 4 - 6)			
SERIOUS EYE DAMAGE/EYE IRRITATION	Causes serious e	eye irritation (pH: 4 - 6)			
RESPIRATORY SENSITIZATION	Due to lack of da	ta the classification is not possible.			
SKIN SENSITIZATION	Due to lack of dat	a the classification is not possible.			
GERM CELL MUTAGENICITY	Suspected mutagenicity. Mutagenicity mod	le data, the classification criteria are not met. gen: The Toolbox profiler in vitro mutagenicity (Ames test) alerts by ISS gives an alert for del in VEGA (Q)SAR platform predicts that the chemical is Mutagen (moderate reliability); KNN del in VEGA (Q)SAR platform predicts that the chemical is Mutagen (moderate reliability).			
CARCINOGENICITY	OSHA	ACETAZOLAMIDE is listed.			
	NTP	ACETAZOLAMIDE is not listed.			
	IARC	ACETAZOLAMIDE is not evaluated.			
	California Proposition 65	This product contains the following chemical known to the State of California to cause birth defects or other reproductive harm: ACETAZOLAMIDE			
ADDITIONAL CARCINOGENICITY INFORMATION	Suspected carcin	le data, the classification criteria are not met. logen: The Toolbox profiler Carcinogenicity (genotox and nongenotox) alerts by ISS gives an enicity; ISS Carcinogenicity model in VEGA (Q)SAR platform predicts that the chemical is lerate reliability)			
REPRODUCTIVE TOXICITY	reproduction; CA Toxicant (EXPER predicts that the	For reproduction: The Toolbox profiler DART scheme v.1.0 gives an alert for toxicity to ESAR developmental toxicity model in VEGA (Q)SAR platform predicts that the chemical is RIMENTAL value); Developmental/Reproductive Toxicity library (PG) in VEGA (Q)SAR platform chemical is Toxicant (EXPERIMENTAL value); DART database in the Toolbox reports that this own developmental potential.			
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Due to lack of da	ta the classification is not possible.			



SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Due to lack of data the classification is not possible.					
ASPIRATION HAZARDS	Based on availab	Based on available data, the classification criteria are not met.				
SIGNS AND SYMPTOMS OF EXPOSURE	Not available EARLY ONSET S Not available	EARLY ONSET SYMPTOMS RELATED TO EXPOSURE:				
	Symptoms related to the physical, chemical, and toxicological characteristics: Numbness, pain, tingling, or weakness in hands or feet. Increased urination. Gastrointestinal disturbances. Loss of appetite. Taste changes. Drowsiness. Hearing problems. Ringing in ears. Fatigue. Dizziness.					
POTENTIAL HEALTH EFFECTS	Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.				
	Ingestion	May be harmful if swallowed.				
	Skin	Harmful if absorbed through skin. Causes skin irritation.				
	Eyes	Causes serious eye irritation.				

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	EC50: 48 Hr: Crustacea: (mg/L): Not available 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	Suspected persistent in the environment: The Danish QSAR database contains information indicating that the substance is predicted as non readily biodegradable.
BIOACCUMULATIVE POTENTIAL	Low: LogPow: -0.26
MOBILITY IN SOIL	Very slightly soluble in water Water Solubility 980 mg/L (30°C) Vapor Pressure 4.09E-09 mm Hg (25°C) Henry's Law Constant 1.40E-16 atm-m ³ /mole (25°C)
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	Not dangerous good
UN NUMBER	Not applicable
CLASS	Not applicable
PACKING GROUP	Not applicable

<u>AUSTRALIA</u>



EU TRANSPORT IN BULK ACCORDING TO Not Listed	HAZCHEM	Not applicable	
ANNEX II OF MARPOL 73/78 AND THE IBC CODE	TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE	Not Listed	
ENVIRONMENTAL HAZARDS Not available	ENVIRONMENTAL HAZARDS	Not available	
SPECIAL SHIPPING INFORMATION Not applicable	SPECIAL SHIPPING INFORMATION	Not applicable	

SECTION 15: REGULATORY INFORMATION

UNITED STATES REGULATIONS

Chemical Name & CAS	CERCLA 40 CFR Part 302.4	SARA (Title III) 40 CFR Part 372.65	EPA 40 CF Appendix A	FR Part 355 Appendix B	Pennsylvania	Right-to-know New Jersey		California Prop 65
ACETAZOLAMIDE 59-66-5	N/L	N/L	N/L	N/L	N/L	N/L	N/L	Х

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
ACETAZOLAMIDE 59-66-5	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
ACETAZOLAMIDE 59-66-5	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 is not applicable to this product.

SUBJECT TO INTERNATIONAL Not applicable AGREEMENT

SECTION 16: OTHER INFORMATION

REFERENCES

Available upon request



ABBREVIATIONS AND ACRONYMS	ACGIH - American Conference of Governmental Industrial Hygienists; AIHA WEEL – American Industrial Hygiene Association Workplace Environment Exposure Levels; CAESAR – Computer Assisted Evaluation of industrial chemical Substances According to Regulations; CAS – Chemical Abstract Service; CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act; EC50 – Effective Concentration, 50%; EPA – Environmental Protection Agency; GHS – Global Harmonized System; HMIS – Hazardous Materials Information System; HSE – Health and Safety Executive; HSIS – Hazardous Substances Information System; IARC – International Agency for Research on Cancer; IDLH - Immediately Dangerous to Life or Health; IRFMN – Ready Biodegradability Model; ISS – Instituto Superiore Sanità; LC50 – Lethal Concentration, 50%; LD50 – Lethal Dose, 50%; MSHA - Mine Safety and Health Administration; NIOSH – National Institute for Occupational Safety and Health; NTP – National Toxicology Program; OSHA PEL – Occupational Safety & Health Administration Permissible Exposure Limits; QSAR – Quantitative Structure-activity relationship; REL - Recommended Exposure Limit; SARA – Superfund Amendments and Reauthorization Act; STEL – Short Term Exposure Limit; TLV – Threshold Limit Value; TWA – Time Weighted Average; WHMIS – Workplace Hazardous Materials Information System
LAST REVISION	02/2023
SUPERSEDES	04/2021
	For a list of changes to the SDS since the last version, please communicate with MEDISCA at <u>www.medisca.com</u>
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