

BIO BASIC INC.
20 KONRAD CRES, MARKHAM ONTARIO L3R 8T4 CANADA
TEL: (905) 474 4493, (800) 313 7224 FAX: (905) 474 5794

Inhalation

Ingestion

MATERIAL SAFETY DATA SHEET
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP
REPAIRING

Notes to Physician

MANUFACTURER'S NAME: BIO BASIC INC.
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FOR CHEMICAL EMERGENCY: (416) 995 9730
ADDRESS: 20 KONRAD CRES, MARKHAM ONTARIO L3R 8T4 CANADA

DATE UPDATED: FEBRUARY 10, 2015

SECTION 1. ----- CHEMICAL IDENTIFICATION -----

Product Name 2"Deoxycytidine Hydrochloride
Product Code(s) 0467
Recommended Use For Further Manufacturing Use Only
Not for Human or Animal Drug Use

SECTION 2. ----- HAZARDS IDENTIFICATION -----

GHS - Classification

Classification Not classified as a hazard

SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Cytidine, 2'-deoxy-, monohydrochloride	EEC No. 223-639-9	Not available	3992-42-5	95-100	-

SECTION 4. ----- FIRST-AID MEASURES -----

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes
Inhalation Move to fresh air. If breathing becomes difficult, give oxygen
Ingestion Clean mouth with water and afterwards drink plenty of water
Notes to Physician Treat symptomatically

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Flammable Properties	Not flammable
Flash Point	Not determined
Suitable Extinguishing Media	Dry chemical, CO2, water spray or regular foam
Hazardous Combustion Products	Carbon oxides, Nitrogen oxides (NOx),
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Not sensitive
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

Personal Precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. ----- HANDLING AND STORAGE-----

Handling	Handle in accordance with good industrial hygiene and safety practice
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place
Incompatible Products	Strong oxidizing agents.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cytidine, 2'-deoxy-, monohydrochloride 3992-42-5			

Engineering Measures	Showers Eyewash stations Ventilation systems
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Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and Body Protection Wear protective gloves/clothing

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice
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SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance	White	
Odor	No information available	
Odor Threshold	No information available	
Decomposition Temperature °C	No information available	
Freezing Point	No information available	
Initial Boiling Point	No information available	
Physical State	Crystalline Powder	
pH	No data available	
Flash Point	Not determined	
Autoignition Temperature	No data available	
Boiling Point/Range	No data available	
Melting Point/Range	162.5 °C	
Flammability Limits in Air	Upper No data available	Lower No data available
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Evaporation Rate	No data available	
MMHG @ 37.8 C	No data available	
Vapor Density	No data available	
Specific Gravity	No data available	
Solubility	No information available	
Partition Coefficient (n-octanol/water)	No data available	
Viscosity	No information available	

SECTION 10. ----- STABILITY AND REACTIVITY -----

Stability	Stable under recommended storage conditions
Incompatible Products	Strong oxidizing agents.
Conditions to Avoid	None known based on information supplied
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx). Hydrogen chloride gas.
Hazardous Polymerization	Hazardous polymerization does not occur

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute Toxicity

Product Information	Product does not present an acute toxicity hazard based on known or supplied information
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Chronic Toxicity

Chronic Toxicity	No known effect based on information supplied
Target Organ Effects	None known.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Ecotoxicity

The environmental impact of this product has not been fully investigated

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations**Contaminated Packaging** Dispose of in accordance with all federal, state and local regulations**SECTION 14. ----- TRANSPORT INFORMATION -----****IATA** Not regulated**DOT** Not regulated**SECTION 15. ----- REGULATORY INFORMATION -----****REACH Title VII Restrictions** No information available.

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poison and Deleterious Substances Control Law:
Cytidine, 2'-deoxy-, monohydrochloride	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Cytidine, 2'-deoxy-, monohydrochloride 3992-42-5 (95-100)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Acute Health Hazard

No

Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

International Regulations

Mexico - Grade No information available.

Canada

WHMIS Hazard Class

Not determined

SECTION 16. ----- OTHER INFORMATION -----

Issuing Date 13-Aug-2009
Revision Date 10-Feb-2015
Revision Note No information available.
Recommended Restrictions No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS