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

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DATE UPDATED: OCTOBER 07, 2015

SECTION 1 CHEMICAL IDENTIFICATION		
Product Name	Cytosine	
Product Code(s)	CD0138	
Recommended Use	For Further Manufacturing Use Only Not for Human or Animal Drug Use	
Synonyms	4-AMINO-2-HYDROXYPYRIMIDINE * 4-AMINO-2(1H)-PYRIMIDINONE * CYTOSINE (8CI) * CYTOSINIMINE *	

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

GHS - Classification

Classification	Skin Irritant 2 Eye Irritant 2
Signal Word	Warning
Hazard Statements	H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
Precautionary Statements	P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+ P352 - IF ON SKIN: Wash with plenty of soap and water P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
2(1H)-Pyrimidinone, 4-amino-	EEC No. 200-749-5	Not available	71-30-7	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
Explosion Data Sensitivity to Mechanical Impact Sensitivity to Static Discharge Protective Equipment and Precautions for Firefighters	Not sensitive Not sensitive 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

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2(1H)-Pyrimidinone, 4-amino-			
71-30-7			

Engineering Measures

Showers Eyewash stations Ventilation systems

Personal Protective Equipment Eye/Face Protection Skin and Body Protection	Tightly fitting safety goggles 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

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES ------

Appearance Odor Odor Threshold Decomposition Temperature °C Freezing Point Initial Boiling Point Physical State pH Flash Point Autoignition Temperature Boiling Point/Range Melting Point/Range Flammability Limits in Air Explosive Properties Oxidizing Properties Evaporation Rate MMHG @ 37.8 C Vapor Density Specific Gravity Solubility Partition Coefficient (n-octanol/water)	No information available No information available Crystalline Powder No data available Not determined No data available No data available >300 °C Upper No data available No information available No data available	Lower No data available
Viscosity	No information available	

SECTION 10 STABILITY AND REACTIVITY		
Stability	Stable under recommended storage conditions	
Incompatible Products	None known based on information supplied	
Conditions to Avoid	None known based on information supplied	
Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx).		

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

Acute	Toxicity

Product Information	Irritating to eye, skin and respiratory system.
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

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:
2(1H)-Pyrimidinone, 4-amino-	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
2(1H)-Pyrimidinone, 4-amino- 71-30-7(95-100)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

International Inventories

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

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	Yes
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 D2B Toxic materials



SECTION 16 OTHER INFORMATION		
Issuing Date	13-Aug-2009	
Revision Date	07-Oct-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.

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End of MSDS