

SIGMA-ALDRICH			
MATERIAL SAFETY DATA SHEET			
		Date Printed: 01/12/2009 Date Updated: 01/29/2006 Version 1.4	
Section 1 - Product and Company Information			
Product Name		N-ACETYLLACTOSAMINE SYNTHETIC	
Product Number		A7791	
Brand		SIGMA	
Company Address		Sigma-Aldrich Canada, Ltd 2149 Winston Park Drive Oakville ON L6H 6J8 CA	
Technical Phone:		9058299500	
Fax:		9058299292	
Emergency Phone:		800-424-9300	
Section 2 - Composition/Information on Ingredient			
Substance Name		CAS #	SARA 313
N-ACETYL-D-LACTOSAMINE*		32181-59-2	No
Formula		C14H25NO11	
Section 3 - Hazards Identification			
EMERGENCY OVERVIEW			
Irritant.			
Irritating to eyes, respiratory system and skin.			
Target organ(s): Eyes. Kidneys.			
HMIS RATING			
HEALTH: 2*			
FLAMMABILITY: 0			
REACTIVITY: 0			
NFPA RATING			
HEALTH: 2			
FLAMMABILITY: 0			
REACTIVITY: 0			
*additional chronic hazards present.			
For additional information on toxicity, please refer to Section 11.			
Section 4 - First Aid Measures			
ORAL EXPOSURE			
If swallowed, wash out mouth with water provided person is conscious. Call a physician.			
INHALATION EXPOSURE			
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.			
DERMAL EXPOSURE			
In case of contact, immediately wash skin with soap and copious amounts of water.			
EYE EXPOSURE			
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.			
Section 5 - Fire Fighting Measures			
FLASH POINT			
N/A			
AUTOIGNITION TEMP			
N/A			
FLAMMABILITY			
N/A			
EXTINGUISHING MEDIA			
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.			
FIREFIGHTING			
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.			
Section 6 - Accidental Release Measures			
PROCEDURE(S) OF PERSONAL PRECAUTION(S)			
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.			
METHODS FOR CLEANING UP			
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.			
Section 7 - Handling and Storage			
HANDLING			
User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.			
STORAGE			
Suitable: Keep tightly closed. Store at -20°C			
Section 8 - Exposure Controls / PPE			
ENGINEERING CONTROLS			
Safety shower and eye bath. Mechanical exhaust required.			
PERSONAL PROTECTIVE EQUIPMENT			
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.			
Hand: Compatible chemical-resistant gloves.			
Eye: Chemical safety goggles.			
GENERAL HYGIENE MEASURES			
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Wash thoroughly after handling.			
Section 9 - Physical/Chemical Properties			
Appearance		Physical State: Solid Color: White	
Property		Value	At Temperature or Pressure
Molecular Weight		383.4 AMU	
pH		N/A	
BP/BP Range		N/A	
MP/MP Range		N/A	
Freezing Point		N/A	
Vapor Pressure		N/A	
Vapor Density		N/A	
Saturated Vapor Conc.		N/A	
SG/Density		N/A	
Bulk Density		N/A	
Odor Threshold		N/A	
Volatile%		N/A	
VOC Content		N/A	
Water Content		< 2 %	
Solvent Content		N/A	
Evaporation Rate		N/A	
Viscosity		N/A	
Surface Tension		N/A	
Decomposition Temp.		N/A	
Flash Point		N/A	
Explosion Limits		N/A	
Flammability		N/A	
Autoignition Temp		N/A	
Refractive Index		N/A	
Optical Rotation		N/A	
Miscellaneous Data		N/A	
Solubility		Solubility in Water:0.5 g/ml H2O clear, colorless	
N/A = not available			
Section 10 - Stability and Reactivity			
STABILITY			
Stable: Stable.			
Materials to Avoid: Strong oxidizing agents.			
HAZARDOUS DECOMPOSITION PRODUCTS			
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.			
HAZARDOUS POLYMERIZATION			
Hazardous Polymerization: Will not occur			
Section 11 - Toxicological Information			
ROUTE OF EXPOSURE			
Skin Contact: Causes skin irritation.			
Skin Absorption: May be harmful if absorbed through the skin.			
Eye Contact: Causes eye irritation.			
Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.			
Ingestion: May be harmful if swallowed.			
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TARGET ORGAN(S) OR SYSTEM(S)			
Heart. Liver. Kidneys. Eyes.			
SIGNS AND SYMPTOMS OF EXPOSURE			
May cause convulsions. Gastrointestinal disturbances.			
Section 12 - Ecological Information			
No data available.			
Section 13 - Disposal Considerations			
APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION			
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.			
Section 14 - Transport Information			
DOT			
Proper Shipping Name: None			
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.			
IATA			
Non-Hazardous for Air Transport: Non-hazardous for air transport.			
Section 15 - Regulatory Information			
EU ADDITIONAL CLASSIFICATION			
Symbol of Danger: Xi			
Indication of Danger: Irritant.			
R: 36/37/38			
Risk Statements: Irritating to eyes, respiratory system and skin.			
S: 26-36/37			
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.			
US CLASSIFICATION AND LABEL TEXT			
Indication of Danger: Irritant.			
Risk Statements: Irritating to eyes, respiratory system and skin.			
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.			
US Statements: Target organ(s): Eyes. Kidneys.			
UNITED STATES REGULATORY INFORMATION			
SARA LISTED: No			
NOTES: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.			
CANADA REGULATORY INFORMATION			
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.			
DSL: No			
NDSL: No			
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Section 16 - Other Information			
DISCLAIMER			
For R&D use only. Not for drug, household or other uses.			
WARRANTY			
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. 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 of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2009Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.			