



# Penta-N-acetylchitopentaose: sc-222146

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: Penta-N-acetylchitopentaose  
 Catalog Number: sc-222146  
 Supplier: Santa Cruz Biotechnology, Inc.  
 2145 Delaware Ave.  
 Santa Cruz, California 95060  
 800.457.3801 or 831.457.3800  
 Emergency: ChemWatch  
 Within the US & Canada: 877-715-9305  
 Outside the US & Canada: +800 2436 2255  
 (1-800-CHEMCALL) or call +613 9573 3112

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
Penta-N-acetylchitopentaose	36467-68-2	No
Synonyms	N-I, N-II, N-III, N-IV, N-V-PENTAACETYLCHITO-PENTAOSE; N,N',N'',N''',N''''-pentaacetylchitinpentaose;	
Formula:	C <sub>40</sub> H <sub>67</sub> N <sub>5</sub> O <sub>26</sub>	
Molecular Weight:	1033.98	

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Caution: Avoid contact and inhalation.

#### HMIS RATING

HEALTH: 1  
 FLAMMABILITY: 0  
 REACTIVITY: 0

#### NFPA RATING

HEALTH: 1  
 FLAMMABILITY: 0  
 REACTIVITY: 0

### 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: Avoid inhalation. Avoid contact with eyes, skin, and clothing.  
 Avoid prolonged or repeated exposure.

#### STORAGE

Suitable: Keep tightly closed. Store in a cool dry place. 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). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.  
 Hand: Compatible chemical-resistant gloves.  
 Eye: Chemical safety goggles.

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

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
Bulk Density	.....	N/A
Odor Threshold	.....	N/A
Volatile%	.....	N/A
VOC Content	.....	N/A
Water Content	.....	N/A
Solvent Content	.....	N/A
Evaporation Rate	.....	N/A
Viscosity	.....	N/A
Surface Tension	.....	N/A
Partition Coefficient	.....	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	.....	N/A
N/A = not available		

*continued...*

## SECTION 10 - STABILITY AND REACTIVITY

### STABILITY

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation: Material may be irritating to mucous membranes and upper respiratory tract.

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 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

### US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact and inhalation.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

### 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

## SECTION 16 - OTHER INFORMATION

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

1/14/2011