

## PRODUCT INFORMATION

### Carbohydrate

**Catalog Number:** C-7005-5

**Description:** NANA tetramer (tetramer of sialic acid or Neu5Ac), sodium salt.

**Lot Number:**

**Source:** Enzymatic cleavage of colominic acid isolated from special strains of *E. coli* possessing KI antigen

**Package Size:** 5 mg / vial.

**Chemical Structure:** [Neu5Ac  $\alpha$ (2,8) Neu5Ac]<sub>2</sub>, where Neu5Ac refers to N-Acetylneuraminic acid.

**Molecular Weight:** 1271.2

**Molecular Formula:** C<sub>44</sub>H<sub>66</sub>N<sub>4</sub>O<sub>33</sub>Na<sub>4</sub>

**Purity:** >95% pure by high performance liquid chromatography.

**Storage:** Store frozen at -20°C. Powder can also be stored refrigerated at 5-8°C.

**Stability:** Stable for more than 1 year when stored in powder form at 5-8°C.

**Caution:** Refer to the enclosed MSDS for information regarding Avidin. The aluminum seals have sharp edges and the vial itself may have cracks which can cause lacerations. Use caution when opening the vial.

**EY LABORATORIES, INC.**  
107 North Amphlett Blvd.  
San Mateo, CA 94401

Tel: 650-342-3296  
Fax: 650-342-2648  
Orders: 1-800-821-0044  
(Outside CA only)

**EY LABORATORIES, INC.**  
107 North Amphlett Blvd.  
San Mateo, CA 94401

Tel: 650-342-3296  
Fax: 650-342-2648  
Orders: 1-800-821-0044  
(Outside CA only)

**MATERIAL SAFETY DATA SHEET**

Effective Date: March 31, 2006

Revision 6

Page 1 of 2

**PRODUCT IDENTIFICATION**

Name: Monosaccharides, Disaccharides, and Polysaccharides.  
 Catalog Number (s): C-6000 to C-8006  
 CAS Numbers: 14215-68-0, 10036-64-3, 6696-41-9, 59-23-4, 6363-53-7, 3458-28-4, 585-99-9, 492-62-6, 131-48-6, 617-04-9, 5989-81-1, 70431-34-4, 11040-27-0, 32181-59-2.  
 Synonyms: N-Acetyl-D-Galactosamine, N-Acetyl-D-Glucosamine,  $\alpha$ -L-Fucose, D-Galactose, Maltose, D-Mannose, Melibiose, D-Glucose, N-Acetylneuraminic Acid (sialic acid and oligomers of sialic acid), Methyl  $\alpha$ -D-Mannopyranoside,  $\alpha$ -Lactose, Colominic Acid, N-Acetylneuraminyl Lactose (sialyllactose), Chitobiose (diacetyl chitobiose), chitotriose (triacetyl chitotriose), N-acetyllactosamine, Methyl  $\beta$ -D-Mannopyranoside Isopropylate.

**EMERGENCY INFORMATION**

EY Laboratories, Inc.  
 107 North Amphlett Blvd.  
 San Mateo, CA 94401

**EMERGENCY PHONE:**  
**650-342-3296**

**HAZARDOUS COMPONENTS**

These carbohydrates are not considered to be hazardous but they may cause irritation or an allergic response in sensitive individuals.

**HEALTH HAZARD INFORMATION**

EXPOSURE LIMITS: None established. The toxicological properties of these products have not been thoroughly investigated. Care should be taken when handling any of these materials.  
 EFFECTS OF OVEREXPOSURE: No effects of overexposure have been documented. The carbohydrates may cause irritation or an allergic reaction  
 ROUTES OF EXPOSURE: Ingestion, inhalation, or contact with skin. Contact with the eyes may also present a hazard.

**PHYSICAL CHARACTERISTICS**

APPEARANCE: White to tan powder.  
 SOLUBILITY: Soluble in water.

**FIRE AND EXPLOSION HAZARDS**

Not considered to be a fire hazard.

EXTINGUISHING MEDIA: Water spray or CO<sub>2</sub>.

SPECIAL FIRE FIGHTING PRECAUTIONS: None required.

NOTE: Most solutions contain 0.05% sodium azide as a preservative. Azide may react with lead and copper plumbing to form explosive metal azides. Flush with copious amounts of water when disposing material in the sink.

**REACTIVITY DATA**

STABILITY: Stable. Decomposition products are not known to be hazardous.  
 HAZARDOUS POLYMERIZATION: Will NOT occur.  
 INCOMPATIBILITY: None known.

**SPILL / LEAK PROCEDURES**

MATERIAL RELEASE / SPILL: Clean up spill with soap and water.

WASTE DISPOSAL: Incinerate, autoclave, or dispose of paper waste in accordance with all Local, State, and Federal regulations. These materials are fully biodegradable.

**EMERGENCY FIRST AID PROCEDURES**

May be harmful if swallowed, injected, or allowed to contact the eyes. Wash contacted area with water for 15 minutes. If inhaled remove to fresh air. Report exposure to the appropriate safety official. Consult a physician if irritation occurs or if there is any indication of an allergic response, such as watering eyes, sneezing, or difficulty breathing. Any eye contact should be reported to a physician immediately.

**SPECIAL HANDLING PRECAUTIONS**

VENTILATION: No special ventilation is required.  
 EYE PROTECTION: Recommended but not required for most applications.  
 RESPIRATORY PROTECTION: Recommended to prevent inhalation of powders. An approved respirator may be required for those individuals already known to be sensitive to these materials.  
 PROTECTIVE GLOVES: Recommended but not required for most applications. Required for those individuals known to be sensitive to any of these materials.

**SPECIAL PRECAUTIONS**

This material is for research and experimental application only. It is not intended for food, drug, household, agricultural, or cosmetic use. All materials should be handled only by technically qualified individuals experienced with working with potentially hazardous chemicals. The above information is correct to the best of our knowledge. The user should make independent decisions regarding completeness of the information, based on all sources available. EY Laboratories, Inc. shall not be held liable for any damage resulting from handling or contact with the above product.

**EY LABORATORIES, INC.**  
 107 North Amphlett Blvd.  
 San Mateo, CA 94401

Tel: 650-342-3296  
 Fax: 650-342-2648  
 Orders: 1-800-821-0044  
 (Outside CA only)

**EY LABORATORIES, INC.**  
 107 North Amphlett Blvd.  
 San Mateo, CA 94401

Tel: 650-342-3296  
 Fax: 650-342-2648  
 Orders: 1-800-821-0044  
 (Outside CA only)