

**Section 1 - Product and Company Identification**

**Manufacturer:** Foresight Biosciences, Inc.  
**Address:** 601 Genome Way Huntsville, AL 35806

**Phone:** 256-327-9405  
**Fax:** 256-270-0778

**Product/Chemical Name:** Sialic Acid Aldolase  
**Common Name/Product Name:** See Detailed List Below

Product Name	Product Number	CAS Number	MDL Number
3'-Sialyllactose sodium salt	FSP2001	35890-38-1	MFC00168068
6'-Sialyllactose sodium salt	FSP2002	35890-39-2	MFC00466953

**Section 2 – Information on Ingredients**

**Ingredient Name(s):** Refer to Section 1 (above)  
**Principal Hazardous Component(s):** N/A  
**Biologic Activity:** Varies (%)

**CAS Number(s):** Refer to Section 1 (above)  
**Chemical & common name(s):** Lactose sodium salt  
**EC Number(s):** Refer to Section 1 (above)

**Section 3 - Hazards Identification**

**Emergency Overview**

**Potential Health Effects**

**Primary Entry Routes:** Inhalation, eyes, skin.  
**Target Organs:** Kidney  
**Acute Effects**

**Inhalation:** May be harmful if inhaled.  
**Eye:** Prolonged exposure may result in irritation or injury.  
**Skin:** Prolonged contact may result in irritation.  
**Ingestion:** May be harmful if swallowed.

**Carcinogenicity:** None known.  
**Medical Conditions Aggravated by Long-Term Exposure:**  
**Chronic Effects:** No information found.

HMIS	
H	0
F	0
R	0
PPE	

**Section 4 - First Aid Measures**

**Inhalation:** Remove to fresh air. Get medical attention if irritation persists.  
**Eye Contact:** Flush eyes with large amounts of water for 15 minutes or until irritation subsides. Remove contact lenses. Hold eyelids apart to ensure thorough cleansing. Get medical attention.  
**Skin Contact:** Flush exposed areas thoroughly with soap and water until all chemical is removed. Remove contaminated clothing and launder before reuse. If irritation persists, get medical attention.  
**Ingestion:** If individual is conscious, give large quantities of water to dilute stomach contents. Do not induce vomiting. Do not attempt to give anything by mouth to a drowsy or unconscious person. Keep warm and quiet. Get prompt medical attention. After first aid, get appropriate in-plant, paramedic, or community medical support.

## Section 5 - Fire-Fighting Measures

**Flash Point:** N/A

**Flash Point Method:** N/A

**Autoignition Temperature:** N/A

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unusual Fire or Explosion Hazards:** None

**Fire-Fighting Instructions:** Treat as a flammable liquid. Use water spray to keep fire-exposed containers cool. Do not release runoff from fire control methods to sewers or waterways.

**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:**

**Spills:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**Containment:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Regulatory Requirements:** N/A

## Section 7 - Handling and Storage

**Handling Precautions:** Wear appropriate protective equipment when handling material.

**Storage Requirements:** Refer to specific product label for the appropriate storage requirements.

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:**

**Ventilation:** Local exhaust ventilation is advisable.

**Respiratory Protection:** Not necessary under general use. If concerned seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Protective Clothing/Equipment:** Wear chemically protective gloves to prevent skin contact. Boots, aprons, and gauntlets are recommended for sensitive individuals to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

## Section 9 - Physical and Chemical Properties

**Appearance and Odor:** Solid, Grey to brown.

**Vapor Pressure:** N/A

**Vapor Density (Air=1):** N/A

**Specific Gravity (H<sub>2</sub>O=1):** Varies

**Boiling Point:** Decomposes

**Melting Point:** N/A

**Flash Point:** N/A

**Evaporation Rate(butyl acetate=1):** N/A

**Solubility in Water:** Powder-Appreciable  
Liquids readily miscible in water

## Section 10 - Stability and Reactivity

**Stability:** Any degradation products are not hazardous

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** N/A

**Conditions to Avoid:** None

**Hazardous Decomposition Products:** If product is in a fire, may release small quantities of carbon monoxide, carbon dioxide, and nitrogen oxides.

## Section 11 - Toxicological Information

Refer to Section 3 for potential health effects information. The toxicological properties of this material have not been fully investigated.

Please remember to always follow good laboratory practices and wear proper personal protective clothing, chemical resistant gloves and lab safety glasses when handling chemicals. May cause irritation and/or allergic reaction(s.)

## Section 12 - Ecological Information

**Ecotoxicity:** N/A

**Environmental Fate:** N/A

**Environmental Transport:** N/A

**Environmental Degradation:** N/A

## Section 13 - Disposal Considerations

Dispose of in accordance with all federal, state and local regulations.

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101):

**Shipping Name:** Not Regulated

**Hazard Class:** N/A

**ID No.:** N/A

**Packing Group:** N/A

**Label:** N/A

**Special Provisions (172.102):**  
None

**Packaging Authorizations**

a) **Exceptions:** N/A

b) **Non-bulk Packaging:** N/A

c) **Bulk Packaging:** Not regulated

## Section 15 - Regulatory Information

### EPA Regulations:

SARA 311/312 Codes: Not available

SARA Toxic Chemicals(40 CFR 372.65): None

SARA EHS(Extremely Hazardous Substance)(40 CFR 355): Not listed, Threshold Planning Quantity(TPQ)

### OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): Not listed

**State Regulations:** None

## Section 16 - Other Information

**Prepared By:** Randall Wilson, PhD

**Revision Notes:** July 2013

**Additional Hazard Rating Systems:** None

**Disclaimer:** The information given and the recommendations made herein apply to our product(s) alone and not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. Foresight Biosciences, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product(s). Therefore, it is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.