

Safety Data Sheet 41121X2 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 11/09/2018 Version: 1.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Substance
Substance name	: N-Acetylneuraminic acid
CAS No	: 131-48-6
Product code	: 4112-1-X2
Formula	: C11H19NO9
Synonyms	: NANA; Sialic acid; Lactaminic acid; 5-Acetamido-3,5-dideoxy-D-glycero-D-galactononulosonic acid
Other means of identification	: MFCD23134617
1.2. Relevant identified uses of the subst	ance or mixture and uses advised against
Use of the substance/mixture	: Laboratory chemicals Manufacture of substances Scientific research and development
1.3. Details of the supplier of the safety d	ata sheet
SynQuest Laboratories, Inc. P.O. Box 309 Alachua, FL 32615 - United States of America T (386) 462-0788 - F (386) 462-7097 info@synquestlabs.com - www.synquestlabs.com	
1.4. Emergency telephone number	(0.11) 500 (000 (05 0
Emergency number	: (844) 523-4086 (3E Company - Account 10069)
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or mi	xture
Classification (GHS-US) Eye Irrit. 2A H319 - Causes serious eye irritation	
Full text of H-phrases: see section 16	DN
2.2. Label elements	on
	r GHS07
2.2. Label elements GHS-US labeling	
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US) Signal word (GHS-US)	: GHSO7 : Warning
2.2. Label elements GHS-US labeling Hazard pictograms (GHS-US)	: CHS07
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Name		Product identifier	%	Classification (GHS-US)
N-Acetylneuraminic acid		(CAS No) 131-48-6	<= 100	Eye Irrit. 2A, H319
(Main constituent) full text of H-phrases: see section 16				
.2. Mixture				
Not applicable				
SECTION 4: First aid measures				
4.1. Description of first aid measures				
First-aid measures general	where	e of accident or if you feel unwell, seel possible). Move the affected personn	el away from the	contaminated area.
First-aid measures after inhalation	respir	ve person to fresh air and keep comfo ation. Get medical advice/attention.		
First-aid measures after skin contact		with plenty of soap and water. Get me		
First-aid measures after eye contact	prese	diately flush eyes thoroughly with wate nt and easy to do. Continue rinsing. Ge	et medical advice	/attention.
First-aid measures after ingestion		DT induce vomiting. Never give anythin out with water. Get medical advice/at		unconscious person. Rinse
4.2. Most important symptoms and effe	ects, both a	acute and delayed		
Symptoms/injuries		nost important known symptoms and e nd/or in section 11.	fects are describ	ed in the labelling (see section
4.3. Indication of any immediate medic	al attentio	n and special treatment needed		
Treat symptomatically.				
SECTION 5: Firefighting measures				
5.1. Extinguishing media	Alask	- Internet for an Order of Marida Day		and the second second state is a second s
Suitable extinguishing media		ol resistant foam. Carbon dioxide. Dry priate for surrounding fire.	powder. Water sp	oray. Use extinguishing media
	appio	phate for surrounding file.		
5.2. Special hazards arising from the s		· •		
l l	ubstance o	· •	oxides. Nitrogen c	ixides.
Fire hazard	ubstance o	or mixture	oxides. Nitrogen c	xides.
Fire hazard 5.3. Advice for firefighters	ubstance of the state of the st	or mixture	xides. Nitrogen c	xides.
Fire hazard 5.3. Advice for firefighters Firefighting instructions	: Thern : In cas : Wear	or mixture nal decomposition generates: Carbon o	in combination v	vith self contained breathing
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release me	substance c : Therm : In cas : Wear appar asures	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se	in combination v	vith self contained breathing
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e	substance c : Therm : In cas : Wear appar asures equipment a	and emergency procedures	in combination v ction 8: "Exposur	vith self contained breathing e controls/personal protection".
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e	substance c : Therm : In cas : Wear appar asures equipment a	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se	in combination v ction 8: "Exposur	vith self contained breathing e controls/personal protection".
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Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release me 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel	substance c : Therm : In cas : Wear appar asures equipment a : Evacu	and emergency procedures uate unnecessary personnel. Ensure ac	in combination v ction 8: "Exposur dequate air ventila	vith self contained breathing re controls/personal protection". ation. Do not breathe dust.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release mea 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures	substance c : Therm : In cas : Wear appar asures equipment a : Evacu	and emergency procedures	in combination v ction 8: "Exposur dequate air ventila	vith self contained breathing re controls/personal protection". ation. Do not breathe dust.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders	asures equipment a : Only o	and emergency procedures uate unnecessary personnel. Ensure ac qualified personnel equipped with suita	in combination v ction 8: "Exposur dequate air ventil ble protective equ	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders	substance of : Therm : In cas : Wear appar asures equipment : : Evacu : Only of : Do no	and emergency procedures uate unnecessary personnel. Ensure ac	in combination v ction 8: "Exposur dequate air ventil ble protective equip e protective equip	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release med 6.1. Personal precautions, protective of General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment	substance of : Therm : In cas : Wear appar asures equipment : : Evacu : Only of : Do no	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se and emergency procedures uate unnecessary personnel. Ensure an qualified personnel equipped with suita t attempt to take action without suitable	in combination v ction 8: "Exposur dequate air ventil ble protective equip e protective equip	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions	substance of : Therm : In cas : Wear appar asures equipment a : Evacu : Only of : Do no refer t	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se and emergency procedures uate unnecessary personnel. Ensure an qualified personnel equipped with suitable to attempt to take action without suitable to section 8: "Exposure controls/person	in combination v ction 8: "Exposur dequate air ventil ble protective equip e protective equip	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release me 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. Notify autho	substance c : Therm : In cas : Wear appar asures equipment : : Evacu : Only c : Do no refer t rities if prod	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se and emergency procedures uate unnecessary personnel. Ensure an qualified personnel equipped with suitable to section 8: "Exposure controls/person uct enters sewers or public waters.	in combination v ction 8: "Exposur dequate air ventil ble protective equip e protective equip	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release met 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment	substance c : Therm : In cas : Wear appar asures equipment a : Evacu : Only o : Do no refer t rities if prod nent and cl	or mixture nal decomposition generates: Carbon of the of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se and emergency procedures uate unnecessary personnel. Ensure an qualified personnel equipped with suitable to section 8: "Exposure controls/person uct enters sewers or public waters.	in combination v ction 8: "Exposur dequate air ventil ble protective equip e protective equip	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.
Fire hazard 5.3. Advice for firefighters Firefighting instructions Protection during firefighting SECTION 6: Accidental release me 6.1. Personal precautions, protective e General measures 6.1.1. For non-emergency personnel Emergency procedures 6.1.2. For emergency responders Protective equipment 6.2. Environmental precautions Avoid release to the environment. Notify autho 6.3. Methods and material for containn	substance c : Therm : In cas : Wear appar asures equipment a : Evacu : Only o : Do no refer t rities if prod nent and cl : Stop l	or mixture nal decomposition generates: Carbon of ee of fire: Evacuate area. gas tight chemically protective clothing atus. For further information refer to se and emergency procedures uate unnecessary personnel. Ensure an qualified personnel equipped with suitable to section 8: "Exposure controls/persor uct enters sewers or public waters. eaning up	in combination v ction 8: "Exposur dequate air ventile ble protective equip a protective equip al protection".	vith self contained breathing re controls/personal protection". ation. Do not breathe dust. uipment may intervene.

No additional information available

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SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective equipment. Avoid contact with skin and eyes.		
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
7.2. Conditions for safe storage, includi	ng any incompatibilities		
Technical measures	: Comply with applicable regulations.		
Storage conditions	: Keep container closed when not in use. Hygroscopic. Keep contents under inert gas.		
Incompatible materials	: Refer to Section 10 on Incompatible Materials.		
Storage temperature	: -2510 °C Use explosion proof freezer		
Storage area	: Store in dry, well-ventilated area.		

### **SECTION 8: Exposure controls/personal protection**

#### 8.1. **Control parameters**

No additional information available

8.2. Exposure controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Hand protection	: Protective gloves. 29 CFR 1910.138: Hand Protection.
Eye protection	: Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection.
Other information	: Safety shoes. 29 CFR 1910.136: Foot Protection.

### **SECTION 9: Physical and chemical properties**

44/00/0040		
Viscosity, kinematic	: No data available	
Viscosity	: No data available	
Decomposition temperature	: No data available	
Auto-ignition temperature	: No data available	
Log Pow	: No data available	
Solubility	: No data available	
Molecular mass	: 309.2699 g/mol	
Relative vapor density at 20 °C	: No data available	
Relative density	: No data available	
Vapor pressure	: No data available	
Oxidizing properties	: No data available	
Explosive properties	: No data available	
Explosion limits	: No data available	
Flammability (solid, gas)	: No data available	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flash point	: No data available	
Boiling point	: No data available	
Freezing point	: No data available	
Melting point	: 184 - 186 °C (dec.)	
рН	: No data available	
Odor threshold	: No data available	
Odor	: No data available	
Color	: No data available	
Physical state	: Solid	
9.1. Information on basic physical and	I chemical properties	

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Viscosit	y, dynamic	: No data available
9.2.	Other information	
No addi	tional information available	
SECT	ION 10: Stability and reactivity	
10.1.	Reactivity	
No addi	tional information available	
10.2.	Chemical stability	
The pro	duct is stable at normal handling and stora	age conditions.
10.3.	Possibility of hazardous reactions	
No addi	tional information available	
10.4.	Conditions to avoid	
Keep av	way from heat, sparks and flame.	
10.5.	Incompatible materials	
Strong	oxidizing agents.	
10.6.	Hazardous decomposition products	
	normal conditions of storage and use, haza	ardous decomposition products should not be produced. Hazardous decomposition products in case o

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTIO	DN 12: Ecological information			
12.1.	Toxicity			
No additio	onal information available			
12.2.	Persistence and degradability			
No additio	No additional information available			
12.3.	Bioaccumulative potential			
No additio	No additional information available			
12.4.	Mobility in soil			
No additional information available				
12.5.	Other adverse effects			
No additio	No additional information available			

SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Waste treatment methods	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.		
Waste disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.		

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Additional information

: Recycle the material as far as possible.

### **SECTION 14: Transport information**

#### Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

#### TDG

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### N-Acetylneuraminic acid (131-48-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

#### CANADA

#### N-Acetylneuraminic acid (131-48-6)

Listed on the Canadian NDSL (Non-Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### National regulations

N-AcetyIneuraminic acid (131-48-6) Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Japanese ISHL (Industrial Safety and Health Law) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on the TCSI (Taiwan Chemical Substance Inventory)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

#### **SECTION 16: Other information**

#### Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
H319	Causes serious eye irritation

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NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.
HMIS III Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard - Materials that will not burn
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

#### SDS US (GHS HazCom 2012)

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 offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.