

Safety Data Sheet

#39596039 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
N-Acetylneuraminic acid (Sialic acid)	131-48-6	C11H19NO9	10	16 Jul 2026

SECTION 1

Identification

Product name	N-Acetylneuraminic acid (Sialic acid)
CAS number	131-48-6
Chemical formula	C11H19NO9
Molecular weight	309.27
SMILES	<chem>CC(=O)NC1C(CC(OC1C(C(CO)O)O)(C(=O)O)O)O</chem>
EC / EINECS number	205-023-1
Recommended use & restrictions	Research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human consumption or veterinary purposes.
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification



WARNING

CODE	HAZARD STATEMENT
H319	Causes serious eye irritation
CODE	PRECAUTIONARY STATEMENT
P264	Wash thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Other hazards (e.g. PBT / vPvB, not classified)	Risk of dust explosion. Does not contain components considered to have endocrine-disrupting properties

SECTION 3

Composition / information on ingredients

Purity / concentration	~100%
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Contact a physician if discomfort continues.
Eye contact	Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Do not induce vomiting.
Symptoms / effects & medical attention	<i>Not applicable</i>

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, carbon dioxide, dry powder or water fog
Unsuitable extinguishing media	None known
Special hazards	Combustible. Thermal decomposition may liberate carbon oxides, nitrous gases (NO _x), and other toxic gases or vapours. Risk of dust explosion. Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x). Development of hazardous combustion gases or vapours possible in the event of fire. Risk of dust explosion.
Advice for firefighters	Evacuate area. Avoid breathing gas/fumes/vapours. Cool containers exposed to heat with water spray and remove if safe.

SECTION 6

Accidental release measures

Personal precautions & PPE	Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Collect spillage with shovel, broom or the like.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature	-15 to -20 °C
Precautions for safe handling	Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product
Conditions for safe storage (incompatibilities)	Recommended storage temperature: -20 to -15°C. Light sensitive. Hygroscopic. Store under inert gas.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Protective gloves and clothing.

Respiratory protection Not required
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

SECTION 9

Physical & chemical properties

Density (g/mL) *Not applicable*

Flash point *Not applicable*

Acidity Acid
DERIVED FROM: LITERATURE

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour White to off-white
DERIVED FROM: LITERATURE

Odour Odourless
DERIVED FROM: LITERATURE

Melting / freezing point 184-186°C
DERIVED FROM: LITERATURE

Boiling point *Not applicable*

Solubility (water) *Not applicable*

pH *Not applicable*

Vapour pressure *Not applicable*

Partition coefficient (log Pow) *Not applicable*

Auto-ignition / decomposition temp 184 °C- Decomposition
DERIVED FROM: LITERATURE

SECTION 10

Stability & reactivity

Chemical stability / reactivity The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Stable under the prescribed storage conditions

Conditions to avoid Avoid direct sunlight

Incompatible materials Strong oxidising agents

Hazardous decomposition products See section 5

SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50) *Not applicable*

Skin corrosion / irritation *Not applicable*

Eye corrosion / irritation Causes serious eye irritation (Category 2).

Respiratory / skin sensitisation *Not applicable*

Carcinogenicity *Not applicable*

Mutagenicity *Not applicable*

Reproductive toxicity *Not applicable*

STOT (single / repeated exposure) *Not applicable*

Aspiration hazard *Not applicable*

Endocrine disruptors *Not applicable*

SECTION 12

Ecological information

Aquatic toxicity *Not applicable*

Persistence & degradability *Not applicable*

Bioaccumulative potential *Not applicable*

Mobility in soil *Not applicable*

PBT / vPvB assessment *Not applicable*

SECTION 13

Disposal considerations

Waste treatment / disposal methods Dispose of in accordance with local/national regulations. Do not empty into drains. Send to a licensed waste-disposal contractor

SECTION 14

Transport information

UN number	Not applicable
Proper shipping name	Not applicable
Class	Not applicable
Packing group	Not applicable
Transport category	Not applicable
Tunnel code	Not applicable
Packing instruction (ADR)	Not applicable
Packing instruction (IMDG)	Not applicable
Environmental hazards	Not applicable
Special precautions for user	Not applicable

SECTION 15

Regulatory information

REACH code	Y113
UFI code	Not applicable
ECHA notification	Not applicable
Chemical safety assessment carried out?	Not applicable

SECTION 16

Other information

Revision notes / other information	Not applicable
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