

1. IDENTIFICATION

1.1 Product identifiers

Product name: N-acetylhexosamine-1-kinase from *Bifidobacterium longum*
 Other name(s): *B. lo. NahK*, BINahK
 Product number: 04E-205.0
 EC No.: 2.7.1.162

1.2 Intended uses

Identified uses: Laboratory chemicals and liquid chromatography.

1.3 Supplier information

Company: Integrated Micro-Chromatography Systems, Inc. (IMCS)
 110 Centrum Drive
 Irmo, SC 29063
 Telephone: +1 (888) 560-2073
 Website: www.imcstips.com
 Email: inquiries@imcstips.com

1.4 Emergency telephone number

Emergency Phone: VelocityEHS USA and Canada: +1 (800) 255-3924
 VelocityEHS International: +1 (813) 248-0585
 IMCS Technical Support: +1 (888) 560-2073

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product is not classified as a hazardous material.

2.2 Label Elements

No labeling applicable.

2.3 Other Hazards

No data available.

2.4 Unknown acute toxicity

No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Proprietary stabilizer*	(CAS-No.) Trade Secret	99+	Not classified.
Sodium azide	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1 (EC Index-No.) 011-004-00-7	0.02	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust

* The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200. See section 16 for full text of hazardous statements.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: Avoid skin and eye contact with product. Consult physician if symptoms occur.
After inhalation: Supply fresh air; consult physician if symptoms occur.
After skin contact: Remove contaminated clothing. Wash skin with soap and plenty of water.
After eye contact: Remove contact lenses and rinse opened eye for at least 15 minutes with running water.
After swallowing: Consult physician if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Overexposure to sodium azide causes central nervous system effects, headache, episodes of low blood pressure, and heart palpitations.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned, seek medical advice and attention. Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

CO₂, dry chemical, foam, or water spray.

5.2 Unsuitable extinguishing media

No data available.

5.3 Specialized hazards arising from the substance or mixture:

Hazardous combustion products: Carbon oxides (CO, CO₂), nitrogen oxides, sodium oxides

5.4 Specialized protective equipment or precautions:

No special measures required. Exercise caution when fighting any chemical fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

Wear protective clothing. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mists, or sprays.

6.2 Environmental precautions

Prevent entry to sewers or public waters.

6.3 Methods and materials for containment and clean up

Contain spills with dikes or absorbents to prevent entry into sewers or streams. Absorb with inert liquid-binding materials (sand, vermiculite, universal binders, sawdust). Containerize materials for proper disposal.

6.4 Reference to other sections

See section 7 for safe handling, section 8 for personal protection equipment, and section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Wash hands and other exposed areas with soap and water after handling. Avoid prolonged contact with eyes, skin, and clothing. Avoid breathing vapors, mists, and sprays. Avoid release into the environment. Handle in accordance with good laboratory practices and safety procedures.

7.2 Conditions for safe storage, including any incompatibilities

Store tightly closed and upright in a cool, dry place. Store away from direct sunlight. Recommended storage temperature is 2-8 °C.

Incompatible materials: strong acids, strong bases, strong oxidizers, water-reactive materials

7.3 Specific end use(s)

For research use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters: See table.

Sodium azide (26628-22-8)	
PEL	None Listed
REL	None Listed
TLV (ceiling)	0.29 mg/m ³

8.2 Engineering controls

Wear personal protective equipment. Ensure safety shower and eyewash station are near work area. Ensure adequate ventilation.

8.3 Protective equipment and hygiene

Breathing equipment: Not required.

Skin protection: Chemical-resistant gloves, protective clothing.

Eye protection: Safety glasses or goggles.

Hygiene: Wash hands and exposed skin thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Appearance:	No data available
Odor:	No data available
Odor threshold:	No data available
pH:	7-8
Melting point/range:	No data available
Freezing point/range:	No data available
Boiling point/range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper flammability or explosive limits:	No data available
Lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	No data available
Solubility:	Miscible with water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Product is not self-igniting
Decomposition temperature:	No data available
Viscosity:	No data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2 Chemical stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3 Possibility of hazardous reactions:** None expected under normal use.
- 10.4 Conditions to avoid:** Direct sunlight, extreme temperatures, incompatible materials.
- 10.5 Incompatible materials:** Strong acids, strong bases, strong oxidizers, water-reactive materials.
- 10.6 Hazardous decomposition products:** None known.

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity

Not classified.

11.2 Primary irritant effect

No data available.

11.3 Additional toxicological information

Overexposure to sodium azide causes central nervous system effects, headache, episodes of low blood pressure, and heart palpitations.

11.4 Carcinogenicity

Not applicable.

Component Toxicity Information	
Sodium azide (26628-22-8)	
LD50 Oral (Rat)	27 mg/kg
LD50 Dermal (Rabbit)	20 mg/kg
LC50 Inhalation (Rat)	0.054 – 0.52 mg/l/4h (Dust/Mist - mg/l/4h)

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Aquatic toxicity: Not classified.
 Persistence and degradability: Not established.
 Bio accumulative potential: Not established.
 Mobility in soil: No data available.

Component Ecotoxicity Information	
Sodium azide (26628-22-8)	
LC50 (Fish) Oncorhynchus mykiss	0.8 mg/L – 96 h
LC50 (Fish) Lepomis macrochirus	0.7 mg/L – 96 h
ErC50 algae	0.348 mg/L

12.2 Additional ecological information

General notes: Avoid release into the environment.
 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Recommendation: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations. Avoid release into the environment.

14. TRANSPORT INFORMATION

Not regulated for transport.

15. REGULATORY INFORMATION

- 15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture**
 SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

Section 302/304 (40CFR355.30/40CFR355.40): 26628-22-8 sodium azide, TPQ/RQ: 500 lbs/1000 lbs

Section 313 (40CFR372.65): 26628-22-8 sodium azide

TSCA Active Listing: All ingredients.

15.2 State regulations

Sodium azide (26628-22-8)
Massachusetts – Right to Know List
New Jersey – Right to Know Hazardous Substance List
Pennsylvania – RTK (Right to Know) – Environmental Hazard List
Pennsylvania – RTK (Right to Know) List

16. OTHER INFORMATION

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. IMCS, Inc and its affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Date of Last Revision: 07/17/2024

GHS (Globally Harmonized System) full text:

H300	Fatal if swallowed
H310	Fatal in contact with skin
H317	May cause an allergic skin reaction
H330	Fatal if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Abbreviations and Acronyms

CAS:	Chemical Abstracts Service (division of the American Chemical Society)
EC:	Enzyme Commission
TLV:	Threshold Limit Value
TSCA:	Toxic Substance Control Act