MATERIAL SAFETY DATA SHEET

Section 1 - Identification

Product identifier	Boc-Nva-OHdicyclohexylaminesalt
Catalog No.	AS4050
Other identifiers	Boc-Nva-OH.DCHA; Boc-L-norvaline dicyclohexylamine salt
Recommended use	Laboratory research, peptide synthesis and preparation of protected peptide/chemical intermediates.
Restrictions on use	For research use only. Not for human or veterinary therapeutic, diagnostic, food, household, or consumer applications.
Responsible party	Alan Scientific Inc.
U.S. address	9031 Shady Grove Court, Gaithersburg, MD 20877 U.S.
Contact	+1 888-757-1116 | contactus@alanscientific.com | www.alanscientific.com
Emergency telephone	+1 888-757-1116

Section 2 - Hazard(s) Identification

OSHA HCS / GHS classification	Acute toxicity (oral) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2; STOT single exposure (respiratory irritation) - Category 3.
Signal word	Warning
Pictograms	GHS07
Hazard statements	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.
Precautionary statements	Avoid breathing dust. Wash thoroughly after handling. Wear protective gloves and eye protection. Use with adequate ventilation.
Other hazards	Chemical, physical and toxicological properties may not be fully characterized. Avoid dust generation and unnecessary exposure.

Section 3 - Composition / Information on Ingredients

Substance / mixture	Substance
Chemical name	Dicyclohexylammonium N-Boc-L-norvalinate
CAS No.	67861-96-5
Molecular formula	C22H42N2O4
Molecular weight	398.59 g/mol
Purity / concentration	Product-specific; refer to Certificate of Analysis (COA).
Hazard-contributing impurities	No additional product-specific impurity classification assigned; refer to lot-specific COA/MSDS where applicable.

Section 4 - First-Aid Measures

Inhalation: Move to fresh air and obtain medical attention if symptoms occur or persist. Skin contact: Remove contaminated clothing and wash thoroughly with soap and water. Eye contact: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do. Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Obtain medical advice if unwell. Treat symptomatically and supportively.

Section 5 - Fire-Fighting Measures

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide as appropriate for the surrounding fire. Thermal decomposition may generate carbon oxides, nitrogen oxides. Firefighters should use self-contained breathing apparatus and appropriate protective equipment when conditions warrant.

Section 6 - Accidental Release Measures

Avoid dust formation and inhalation. Provide adequate ventilation and use suitable personal protective equipment. Collect spilled solid carefully without generating airborne dust and place in a compatible closed container for disposal. Prevent unnecessary release to drains or the environment.

Section 7 - Handling and Storage

Handle using good laboratory practice. Avoid inhalation of dust and contact with eyes, skin and clothing. Keep container tightly closed, dry and protected from contamination. Store according to the product label and lot-specific documentation. Keep away from incompatible materials such as strong oxidizing agents unless supplier documentation indicates otherwise.

Section 8 - Exposure Controls / Personal Protection

Occupational exposure limits	No substance-specific OSHA PEL or ACGIH TLV identified in the reviewed information.
Engineering controls	Use general laboratory ventilation; local exhaust is appropriate where dust may be generated.
Eye / face protection	Safety glasses or other suitable laboratory eye protection.
Skin / body protection	Suitable chemical-resistant gloves and laboratory clothing.
Respiratory protection	Normally not required for controlled small-scale handling. If dust is generated and ventilation is insufficient, use an appropriate NIOSH-approved particulate respirator.
Hygiene measures	Wash hands after handling. Do not eat, drink or smoke in chemical handling areas.

Section 9 - Physical and Chemical Properties

Physical state	Solid
Appearance	Product-specific solid; refer to COA for lot-specific appearance.
Odor	No data available.
pH	No data available.
Melting point	No validated product-specific value assigned in this MSDS.
Flammability	No validated classification assigned beyond Section 2.
Flash point	No data available.
Solubility	Product- and solvent-dependent; refer to technical/lot documentation where available.
Molecular weight	398.59 g/mol

Section 10 - Stability and Reactivity

Reactivity: No comprehensive reactivity data available. Chemical stability: Expected to be stable under recommended storage and normal laboratory handling. Conditions to avoid: excessive heat, moisture or conditions inconsistent with product-specific storage. Incompatible materials: strong oxidizing agents and other incompatible reagents relevant to the specific synthetic chemistry. Hazardous decomposition products may include carbon oxides, nitrogen oxides.

Section 11 - Toxicological Information

Likely exposure routes	Inhalation of dust, eye contact, skin contact and ingestion.
Acute toxicity	See Section 2. H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.
Skin / eye effects	See Section 2 where applicable; otherwise product-specific data are limited.
Sensitization	See Section 2 where applicable; otherwise product-specific data are limited.
Mutagenicity / carcinogenicity / reproductive toxicity	No validated product-specific classification assigned in this MSDS.
STOT	See Section 2 where applicable; otherwise product-specific data are limited.
Additional information	Chemical and toxicological properties may not be fully investigated. Handle using good laboratory hygiene and safety practice.

Section 12 - Ecological Information

No comprehensive product-specific ecotoxicity data are assigned in this MSDS. Persistence, bioaccumulation and mobility data are limited. Avoid unnecessary environmental release.

Section 13 - Disposal Considerations

Dispose of product, residues and contaminated packaging in accordance with applicable federal, state and local requirements. Do not mix with incompatible waste streams. Materials classified as environmentally hazardous should not be released to drains or surface waters.

Section 14 - Transport Information

Transport status	No regulated transport classification assigned in the reviewed product-specific sources; confirm current carrier and jurisdiction requirements.
UN / class / packing group	UN3077 / Class 9 / PG III only where indicated above; otherwise not assigned in this draft.
Special precautions	Verify current carrier, package-size and jurisdiction requirements before shipment; use sealed compatible packaging.

Section 15 - Regulatory Information

OSHA HCS	Hazard communication information is summarized in Section 2 based on current publicly available supplier/regulatory information reviewed for this draft.
Federal / state considerations	Users and distributors are responsible for confirming current inventory, reporting, transport and state-specific obligations for the supplied lot and intended transaction.

Section 16 - Other Information

Revision	1.0
Date of preparation / revision	2026-09-06
Revision summary	Initial Alan Scientific MSDS for Specialty Peptide Building Blocks Batch 2 using the no-logo 9031 Gaithersburg template.
Data / assessment basis	Alan Scientific product identity data; current publicly available supplier and regulatory records reviewed for the product/CAS; OSHA HCS framework.
Classification note	Classification is based on reviewed supplier data for this CAS/product identity. Final release should remain aligned with the upstream lot-specific MSDS.

Safety information notice: This research-use MSDS is provided in good faith from information reasonably available at the revision date. It is not a product specification or warranty. Final released safety information should remain aligned with the actual upstream supplier and lot-specific documentation for the material supplied.