INDOFINE Chemical Company, Inc.
121 Stryker Lane, Building 30
Hillsborough, NJ 08844 USA
Phone: (908) 359-6778; Fax: (908) 359-1179

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name:	Z-LYS(Z)-ONP
Synonym:	Na,e-bis-Z-L-lysine-4-nitrophenyl ester
Product number:	04-2024
Supplier:	INDOFINE Chemical Company, Inc. 121 Stryker Lane Building 30 Hillsborough, NJ 08844
Telephone:	(908) 359-6778
Fax:	(908) 359-1179
Emergency phone	800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Avoid prolonged exposure.
Do not breathe vapor.
Use caution when handling.
Exposure to any chemical should be limited.
To the best of our knowledge, the health hazards of this product have not been fully investigated.
This product is provided solely for the purpose of research and development.

POTENTIAL HEALTH EFFECTS
The toxicological properties of the material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation/ingestion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:	Na,e-bis-Z-L-lysine-4-nitrophenyl ester
CAS#:	21160-82-7
Molecular Formula:	C28H29N3O8
Molecular weight:	535.55

SECTION 4: FIRST-AID MEASURES

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with clean, running water for at least 15 minutes while keeping eyes open. Cool water may be used. Seek medical attention.

Skin Contact: After contact with skin, wash with generous quantities of running water. Gently and thoroughly was affected area with running water and non-abrasive soap. Cool water may be used. Cover the affected area with emollient. Seek medical attention. Wash any contaminated clothing prior to reusing.

Inhalation: Remove the victim from the source of exposure to fresh, uncontaminated air. If victim's breathing is difficult, administer oxygen. Seek medical attention.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: Carbon dioxide, dry powder, regular foam.

Special fire fighting procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards/decomposition of product: Can emit toxic fumes under fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled or otherwise released into the environment:
Wear appropriate respirator, impervious boots and heavy rubber (or otherwise impervious) gloves. Scoop up solid material or absorb liquid material and place into appropriate container. Ventilate area and wash affected spill area after pickup is complete. Wash skin immediately with plenty of water. Place solid or absorbed material into containers and close for disposal.

SECTION 7: HANDLING AND STORAGE

Do not breathe dust or vapor.
Have safety shower and eye wash available.
Do not get in eyes, on skin or on clothing.
Keep container tightly closed.
Store in a cool, dry, well-ventilated place.
Ensure adequate ventilation during use.
Use only in a chemical fume hood.
Store at 0-8oC

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand: Handle with chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye: Wear protective safety goggles. Use equipment for eye protection tested and approved under appropriate government standards.

Skin and Body: Wear protective clothing and chemical resistant boots to protect against chemical. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Molecular formula:	C28H29N3O8
Molecular weight:	535.55
Melting/boiling point:	
pH:	no data available
Flash point:	no data available
Ignition temperature:	no data available
Autoignition temperature:	no data available
Decomposition temperature:	no data available
Lower explosion limit:	no data available
Upper explosion limit:	no data available
Vapor pressure:	no data available
Density:	no data available
Viscosity:	no data available
Water solubility:	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapor density:	no data available
Odor:	no data available
Odor threshold:	no data available
Evaporation rate:	no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
No hazardous reactions during storage and handling complying with the instructions.

Conditions to avoid
No data available.

Incompatible materials
No data available

Hazardous decomposition products
No hazardous decomposition products if the instructions for handling and storage are respected. During high overheating of the substance or during a fire, hazardous decomposition products may be produced.

SECTION 11 : TOXICOLOGICAL INFORMATION

Acute oral toxicity:	no data available
Acute dermal toxicity:	no data available
Acute inhalation toxicity:	no data available
Skin corrosion:	no data available
Skin irritation:	no data available
Serious eye damage:	no data available
Eye irritation:	no data available

Respiratory sensitization: no data available
Skin sensitization: no data available
Germ cell mutagenicity: no data available
Carcinogenicity: no data available
Reproductive toxicity: no data available
Specific target organ toxicity: (Single exposure) no data available
Specific target organ toxicity: (Repeated exposure) no data available
Aspiration hazard: no data available

To the best of our knowledge, the toxicological properties of this product have not been fully investigated or determined.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: no data available
Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
Results of PBT and vPv assessment: no data available
Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT (US)
Unrestricted
IATA
Unrestricted

SECTION 15: REGULATORY INFORMATION

Adhere to all Federal, State, and local regulations.

SECTION 16: OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. This shall only be used as a guide. The data may in no case be considered as product specifications. It does not represent any guarantee of the properties of the product. It is provided for information purposes only with no obligation on our part. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event, shall *INDOFINE Chemical Company, Inc.* be held liable for the use which is made of our products and for the information given above. *INDOFINE Chemical Company, Inc* assumes no responsibility for any damage resulting from handling or from contact with the above product.