



SAFETY DATA SHEET

Revision Date **21-Mar-2012**

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Name beta-NICOTINAMIDE ADENINE DINUCLEOTIDE OXIDIZED FREE ACID
Recommended Use For research use only
Registration Number No information available

1.1 Product Identifier

Catalog Number: 160047
Supplier: MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency Telephone Number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

1.2 Relevant identified uses of the substance or mixture and uses advised against

2. HAZARDS IDENTIFICATION

GHS - Classification

Aspiration Toxicity	Not classified
Acute Oral Toxicity	Not classified
Acute Dermal Toxicity	Not classified
Acute Inhalation Toxicity - Gas	Not classified
Acute Inhalation Toxicity - Vapors	Not classified
Acute Inhalation Toxicity - Dusts and Mists	Not classified
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Eye Irritation	Not classified
Respiratory Sensitization	Not classified
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
Acute Aquatic Toxicity	Not classified for acute
Chronic Aquatic Toxicity	Not classified for chronic
Ozone	Not applicable

GHS Label elements, including precautionary statements

Physical Hazards None

Risk Combination Phrases

R36/37/38 - Irritating to eyes, respiratory system and skin.

S-phrases

S20 - When using do not eat or drink.

S25 - Avoid contact with eyes.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Safety Combination Phrases:

S37/39 - Wear suitable gloves and eye/face protection.

Not Hazardous

Not classified

NFPA rating:

NFPA Health: 0
NFPA Flammability: 0
NFPA Reactivity: 0
NFPA Special Note: -

Precautionary Statements

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms: Not Available
Formula: C₂₁H₂₇N₇O₁₄P₂
Molecular weight: 663.4 (anhyd.)

Chemical Name	EC No.	CAS Number	Weight %	Classification (67/548)	Classification (Reg. 1272/2008)	REACH Registration Number
beta-NICOTINAMIDE ADENINE DINUCLEOTIDE OXIDIZED FREE ACID	EEC No. 200-184-4	53-84-9	100	Xi		No data available

For the full text of the R phrases and H statements mentioned in this section, see Section 2

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Do not rub affected area. Get medical attention immediately if irritation persists.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air in case of accidental inhalation of vapors. Immediate medical attention is required. Toxic by inhalation

Rinse mouth Clean mouth with water and afterwards drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Main Symptoms No information available

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available

5.2 Special hazards arising from the substance or mixture

No information available.

5.3 Advice for firefighters

Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

See Section 12 for additional information.

6.2 Environmental precautions

Refer to protective measures listed in Sections 7 and 8.

6.3 Methods and materials for containment and cleaning up

No information available.

6.4 Reference to other sections

See Section 12 for additional information

7. HANDLING AND STORAGE

Storage

0°C

DESICCATE

7.1 Precautions for safe handling

Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place

7.3 Specific end uses

Exposure Scenario

No information available

Other Guidelines

No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available

8.2 Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye Protection	Tightly fitting safety goggles
Skin and Body Protection	Long sleeved clothing
Hand Protection	Protective gloves
Respiratory Protection	No special protective equipment required.
Other Protective Equipment	Impervious clothing.
Environmental Exposure Controls	No information available.

Hygiene Measures Provide regular cleaning of equipment, work area and clothing..

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical State Solid.

Physical Property Data

pH Value	No data available
Flash Point	No information available
Autoignition Temperature	No data available
Melting/Freezing Point	
Boiling Point (°C)	No information available.
Vapor Pressure	No data available
Vapor Density	No information available
Water Solubility	No data available
Evaporation Rate	No data available.
Flammability (solid, gas)	No data available
Flammability Limits in Air	
upper flammability limit	No data available
lower flammability limit	No data available
Density	No data available
Specific Gravity	No data available.
Decomposition Temperature	No data available
Viscosity, Kinematic	No data available.

**Viscosity, Dynamic
Explosive Properties
Oxidizing Properties
VOC Content (%)**

No data available.
No information available.
No information available
No information available

9.2 Other Safety Information

Other Safety Information

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

None in particular

10.5 Incompatible Materials

None in particular

10.6 Hazardous Decomposition Products

None under normal processing.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	Product does not present an acute toxicity hazard based on known or supplied information
Inhalation	No information available.
Eye Irritation	No information available.
Acute toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity

Mutagenic Effects	Contains no ingredient listed as a mutagen.
Carcinogenic Effects	None known.
Reproductive Toxicity	None known
Developmental Toxicity	None known.
Aspiration hazard	None known

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

12.2 Persistence and degradability

No data is available on the product itself

12.3 Bioaccumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

IMDG/IMO

Not regulated

ICAO

Not regulated

ICAO/IATA

Not regulated

DOT

Not regulated

TDG

Not regulated

MEX

Not regulated

15. REGULATORY INFORMATION

International Inventories

15. REGULATORY INFORMATION

Chemical Name	TSCA	EINECS / ELINCS	DSL / NDSL	PICCS	ENCS	IECSC	AICS	KECL
beta-NICOTINAMI DE ADENINE DINUCLEOTI DE OXIDIZED FREE ACID	Listed	Listed	Listed		Listed	Listed	Listed	Listed

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances / EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippine Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

16. OTHER INFORMATION

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Material Safety Data Sheet

Key literature references and sources for data

www.ChemADVISOR.com/