

Safety Data Sheet

#19152391 · 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
NADH disodium salt trihydrate	606-68-8	C21H27N7Na2O14P2.3H2O	—	10 Feb 2026

SECTION 1

Identification

1.1 Product identifier

Product name	NADH disodium salt trihydrate
CAS number	606-68-8
EC / EINECS number	210-123-3
Chemical formula	C21H27N7Na2O14P2.3H2O
Molecular weight	763.40
SMILES	<chem>C1C=CN(C=C1C(=O)N)[C@H]2[C@@H]([C@@H]([C@H](O2)COP(=O)([O-])OP(=O)([O-])OC[C@H]3[C@H]([C@H]([C@@H](O3)N4C=NC5=C(N=CN=C54)N)O)O)O.[Na+].[Na+]</chem>

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

For research use, laboratory use and manufacture of chemicals only. Not for human or animal use

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008.

2.2 Label elements

NONE

CODE	PRECAUTIONARY STATEMENT
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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2.3 Other hazards

Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	NADH disodium salt trihydrate
CAS number	606-68-8
EC number	210-123-3
Concentration / purity	c. 100% NADH disodium salt trihydrate (CAS: 606-68-8)
Classification according to Regulation (EC) No 1272/2008	This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008.
Hazard statements	None
Acute toxicity estimate (ATE)	No data available
Impurities / stabilising additives	None

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move to fresh air. Get medical attention if any discomfort continues.
Skin contact	Rinse skin with water. If skin irritation or rash occurs: get medical advice/attention.
Eye contact	Remove contact lenses if present. Rinse eyes with water. If eye irritation persists: get medical advice/attention.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

Oxides of phosphorus

Sodium oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs.

Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature -15 to -20 °C

Conditions for safe storage (incompatibilities) Hygroscopic. Store under inert gas. Light sensitive

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

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

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

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 Gloves: Nitrile Rubber, 0.11mm (480 mins).

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.

Other protection *No data available*

Environmental exposure controls *No data available*

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour Beige
DERIVED FROM: LITERATURE

Odour Odourless
DERIVED FROM: LITERATURE

Melting / freezing point *Not applicable*

Boiling point *Not applicable*

Flammability *No data available*

Lower and upper explosion limit	<i>No data available</i>
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Flash point	<i>Not applicable</i>
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Auto-ignition temperature	<i>Not applicable</i>
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Decomposition temperature	<i>No data available</i>
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pH	<i>Not applicable</i>
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Acidity	Neutral DERIVED FROM: LITERATURE
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Kinematic viscosity	<i>No data available</i>
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Solubility	712 g/l at 22.5 °C DERIVED FROM: LITERATURE
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Partition coefficient n-octanol/water (log value)	<i>Not applicable</i>
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Vapour pressure	<i>Not applicable</i>
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Density (g/mL)	1.995 g/mL DERIVED FROM: LITERATURE
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Relative vapour density	<i>No data available</i>
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Particle characteristics	<i>No data available</i>
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9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture. Avoid direct sunlight

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous decomposition products

See section 5

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	Information on hazard classes as defined in Regulation (EC) No 1272/2008
Skin corrosion / irritation	Not classified
Eye corrosion / irritation	Not classified
Respiratory / skin sensitisation	Not classified
Carcinogenicity	Not classified
Mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT (single / repeated exposure)	Not classified
Aspiration hazard	Not classified

11.2 Information on other hazards

Not classified

SECTION 12

Ecological information

12.1 Toxicity

semi-static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h Ref: External SDS

static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h Ref: External SDS

12.2 Persistence and degradability

aerobic - Exposure time 28 d Result: 90 % - Readily biodegradable Ref: External SDS

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance-specific regulations (e.g. licences) *No data available*

REACH code Y113

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

Other information

Revision notes / other information

Previous SDS ver. 2 published 5th August 2024

Hazard classification and labelling according to Regulation (EC) 1272/2008

All eye/face protection should comply with EN ISO 16321-1:2022

Respiratory equipment: Reusable air-purifying respirator (APR)

Filter Type: ABEK

Standard: EN 14387

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.