



Safety Data Sheet
*according to 1907/2006/EC, Article 31, amended by
Regulation (EU) No. 453/2010*

VITAMIN B3

Date: 24/05/2021

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Trade Name: Vitamin B3

INCI Name: Niacinamide

REACH Registration Number: 01-2119968268-22

Substance name: 3-Pyridinecarboxamide.

CAS No.: 98-92-0

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

Use of the Sub-stance/Mixture: Ingredient for personal care products

1.3 Details of the supplier of the safety data sheet

Naturally Balmy Ltd

8 Benson Road

Nuffield Industrial Estate

Poole

BH17 0GB

Tel: +44 (0)1202 567046

Email: sales@naturallybalmy.co.uk

1.4 Emergency telephone number

Health and Safety Executive (HSE) Chemicals Regulation Directorate

5S.1 Redgrave Court, Merton Road, Bootle, Merseyside. L20 7HS

Telephone: +44 151 951 3317

Email: biocidesenquiries@hse.gsi.gov.uk

REACH and CLP UK CA Help Desk, Health and Safety Executive

2.3 Redgrave Court, Merton Road, L20 7HS Bootle, Merseyside

Email: ukreachca@hse.gsi.gov.uk

2. Hazards Identification

2.1 Classification of the substance or mixture**Classification (REGULATION (EC) No 1272/2008)**

Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements**Labelling (REGULATION (EC) No 1272/2008)****Hazard pictograms:****Signal word:** Warning.**Hazard statements:** H319 Causes serious eye irritation.**Precautionary statements:****Prevention:**

P264 Wash skin thoroughly after handling.

P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Risk of dust explosion.

3. Composition/Information on ingredients**Synonyms:**

nicotinic acid amide

Vitamin PP

Brief description of the product: Substance.**Molecular formula:** C₆H₆N₂O**3.1 Substances****Hazardous components:**

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
nicotinamide	98-92-0 202-713-4	>= 90 - <= 100

3.2 Mixtures**4. First Aid Measures****4.1 Description of first aid measures****General advice:**

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

If inhaled:

Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact:

Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact:

Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed:

Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No specific symptoms known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Water
Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: None known.

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Consider dust explosion hazard.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.
Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.

6.2 Environmental precautions

Try to prevent the material from entering drains or water courses.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust.

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling:

Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion:

Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
Take precautionary measures against static discharges.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of work-day.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

No special storage conditions required.
Keep container tightly closed and dry.

7.3 Specific end use(s)

Specific use(s): Not applicable.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Vitamin B3	Industrial use	Inhalation	Long-term systemic effects	43.75 mg/m ³
	Professional use	Inhalation	Long-term systemic effects	21.88 mg/m ³
	Workers	Skin contact	Long-term systemic effects	12.5 mg/kg bw/d
	Professional use	Ingestion	Long-term systemic effects	12.5 mg/kg bw/d

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Vitamin B3	Fresh water	1 mg/l
	Marine water	0.1 mg/l
	Fresh water sediment	1.1 mg/l
	Marine sediment	1.1 mg/l
	Sewage treatment plant	423.5 mg/l
	Soil	0.33 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection: Safety glasses with side-shields.

Hand protection:

Consider the hazard characteristics of this product and any special workplace conditions when selecting the appropriate type of protective gloves.

Glove material: for example nitrile rubber.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Crystalline powder.

Colour: White.

Odour: Odourless.

Odour Threshold: No information available.

pH: 6.0 - 7.5 (as aqueous solution).

Melting point/range: 128 - 131 °C

Boiling point/boiling range: 224 °C (at 20 hPa)

Flash point: 182 °C

Flammability (solid, gas): Not highly flammable (Method: Flammability (solids)).

Vapour pressure: 0.00045 hPa (25 °C; OECD Test Guideline 104)

Relative vapour density: Not applicable.

Density: 1.4 g/cm³ (at 25 °C)

Water solubility: 500 g/l (25 °C)

Solubility in other solvents:

Ethanol: 660 g/l

Diethylether: ca.10 g/l

Glycerol: soluble

Partition coefficient: n-octanol/water: log Pow -0.38 (20 °C; OECD Test Guideline 107).

Auto-ignition temperature: No self ignition observed in the Grever oven at temperatures below melting point.

Thermal decomposition: Not relevant.

Explosive properties: Not explosive.

Oxidizing properties: No data available.

9.2 Other information

Combustibility index for deposited dust:

2 (23 °C)

2 (100 °C)

Dust explosion class: St(H)2 (Milled sample, Median value of the tested sample 0.041 mm, Loss on drying 0.5 %; The value was determined in the modified Hartmann tube.).

Minimum ignition energy:

3 - 10 mJ (Milled sample, Median value of the tested sample 0.041 mm, Loss on drying 0.5 %, EN 13821)

The Minimum ignition energy (MIE) of a dust/air mix depends on the particle size the water content and the temperature of the dust. The finer and the dryer the dust the lower the MIE.

General remark: The indicated dust explosion characteristics are only valid for this product and are sensitive to the sample's parameters.

Powder volume resistivity: ca. 5E+09 Ohmm (Product sample, Median value of the test-ed sample 0.170 mm, Loss on drying 0.2 %).

Minimum ignition temperature of a dust/air mix: 480 °C (Median value of the tested sample 0.170 mm) determined in the BAM oven.

Molecular weight: 122.13 g/mol
Particle size: ≤ 10 % < 0.050 mm
Dissociation constant: pKa 3.35
Impact sensitivity: Not impact sensitive.

10. Stability and Reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Acids and bases.

Strong oxidizing agents.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x).

Carbon oxides.

11. Toxicological Information

11.1 Information on toxicological effects

Acute oral toxicity:

LD50 (rat, male and female): > 2 500 mg/kg (OECD Test Guideline 423)

LD50 (mouse): 2 500 mg/kg

Acute dermal toxicity: LD50 (rabbit): > 2 000 mg/kg (OECD Test Guideline 402).

Skin irritation:

No skin irritation (rabbit, OECD Test Guideline 404).

May cause skin irritation in susceptible persons.

Eye irritation:

Moderate eye irritation (rabbit, OECD Test Guideline 405).

Irritating to eyes.

Sensitisation: Did not cause sensitization. (Guinea pig, Buehler Test, OECD Test Guideline 406).

Genotoxicity in vitro:

Not mutagenic (Ames test, OECD Test Guideline 471)

Not genotoxic (Chromosome aberration test in vitro, OECD Test Guideline 473).

Genotoxicity in vivo: Not genotoxic (In vivo micronucleus test, mouse, OECD Test Guideline 474)

Carcinogenicity: (mouse) Did not show carcinogenic effects in animal experiments.

Reproductive toxicity: No indication for adverse effects on fertility known.

Teratogenicity: Not teratogenic. (Rabbit, Oral, OECD Test Guideline 414).

STOT - single exposure: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure:

NOAEL (Oral, rat, 28 d) : 215 mg/kg bw/d

Subacute toxicity study (28 days) (OECD Test Guideline 407).

Experience with human exposure: RDA (Recommended Daily Allowance) 15 - 18 mg

Further information: May cause irritation of respiratory tract.

Aspiration toxicity: No aspiration toxicity classification.

12. Ecological Information

12.1 Toxicity

Toxicity to fish:

Poecilia reticulata (guppy)

LC50 (96 h) > 1.000 mg/l

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates:

Daphnia magna (Water flea)

EC50 (24 h) > 1 000 mg/l

(OECD Test Guideline 202)

Toxicity to algae:

Desmodesmus subspicatus (green algae)

IC50 (72 h) > 1.000 mg/l

(OECD Test Guideline 201)

Toxicity to bacteria:

Pseudomonas putida

EC10 (18 h) 4.235 mg/l

12.2 Persistence and degradability

Biodegradability:

Readily biodegradable.

95 % (28 d)

(OECD Test Guideline 301E)

12.3 Bioaccumulative potential

Bioaccumulation: No data available.

Partition coefficient: n-octanol/water: log Pow -0.38 (20 °C; OECD Test Guideline 107).

12.4 Mobility in soil

Distribution among environmental compartments: No data available.

12.5 Results of PBT and vPvB assessment

Assessment:

The substance does not fulfil the PBT criteria.

The substance does not fulfil the vPvB criteria.

12.6 Other adverse effects

Additional ecological information: There is no data available for this product.

13. Disposal Considerations

13.1 Waste treatment methods

Product:

Do not contaminate ponds, waterways or ditches with chemical or used container.

Do not dispose of waste into sewer.

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging:

Dispose of as unused product.

Do not re-use empty containers.

14. Transport Information

14.1 UN number

Not regulated as a dangerous good.

14.2 UN proper shipping name

Not regulated as a dangerous good.

14.3 Transport hazard class(es)

Not regulated as a dangerous good.

14.4 Packing group

Not regulated as a dangerous good.

14.5 Environmental hazards

Not regulated as a dangerous good.

14.6 Special precautions for user

Remarks: Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory Information

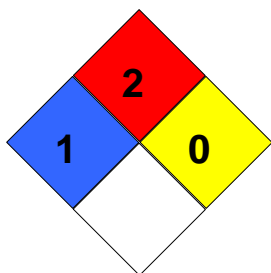
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

NFPA Classification:

Health hazard: 1

Fire Hazard: 2

Reactivity Hazard: 0



15.2 Chemical safety assessment

|| A Chemical Safety Assessment has been carried out for this substance.

16. Other Information

Full text of other abbreviations:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA – International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC – New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information contained in this SDS is accurate to the best of our knowledge and has been obtained from a variety of sources. No liability can be accepted arising out of the use, application or processing of this product. It is the users' responsibility to determine the safe conditions for the use of this product.

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