

**SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

**1.1 Product identifier**

**Product Name:** Niacinamide  
**Product Codes(s):** NIACIN-274-PL  
**Synonyms:** 3-Pyridinecarboxamide, Nicotinamide, Vitamin B, Niacinamide Feed Grade, Niacinamide Free Flowing  
**REACH Registration:** No data available

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

**General Use:** Veterinary/Animal dietary supplement, feed additive

**1.3 Details of the supplier and of the safety data sheet**

**Manufactured By**  
 Ag ProVision, LLC  
 277 Faison McGowan Road  
 Kenansville, NC 28349 USA  
 +1-910-296-0302  
 customercare@agprovision.com

**1.4 Emergency telephone number:**

In the continental USA call CHEMTREC: +1-800-424-9300 (24 hours)  
 Outside the continental USA call CHEMTREC: +1-703-527-3887 (24 hours)

**SECTION 2 - HAZARDS IDENTIFICATION**

**2.1 Classification of substance or mixture**

**Product definition:** Substance  
**Classification (Regulation (EC) No 1272/2008)**  
 Eye Irritation, Category 2A [H319]

**2.2 Label Elements**

**Labeling (Regulation (EC) No 1272/2008)**

**Hazard Symbol(s):** 

**Signal Word:** Warning

**Hazard Statement(s):** H319 - Causes serious eye irritation

**Precautionary Statements:**

**[Prevention]** P264 - Wash hands and other skin areas exposed to material thoroughly after handling.  
 P280 - Wear protective gloves, protective clothing and eye 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 attention.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

% by Weight	Ingredient	CAS Number	EC Number	Index Number	EC Classification
>99.5	Nicotinamide	98-92-0	202-713-4	-----	Xi, R36

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

**3.2 Mixtures**

**Chemical characterization (preparation)**  
 Not applicable

**SECTION 4 - FIRST AID MEASURES**

**4.1 Description of first aid measures**

**Inhalation:** If product dust causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Get medical attention. If unconscious place in the recovery position and get immediate medical attention. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Symptoms may be delayed. In event of complaints or symptoms, avoid further exposure.

**Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present, after the first 5 minutes and continue rinsing. If irritation persists, get medical attention, preferably from an ophthalmologist.

**Skin:** Shower or rinse skin with water while removing contaminated clothing. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure and seek medical attention.

**Ingestion:** Rinse mouth with water. Give 2 - 4 cupfuls of water to drink. Remove dentures, if present. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter into the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and get medical attention immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

##### Potential health symptoms and effects

**Eyes:** May cause mild to moderate eye irritation with inflammation, burning and tearing. Dust may cause mechanical abrasion of the cornea.

**Skin:** Not expected to cause skin irritation.

**Inhalation:** Dust may cause irritation of nose, throat and lungs.

**Ingestion:** May cause digestive upset including nausea, vomiting and diarrhea.

**Chronic:** None known

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 Extinguishable media

**Suitable methods of extinction:** Use water spray, water fog, dry chemical, carbon dioxide or chemical foam extinguishers.

**Unsuitable methods of extinction:** None known

### 5.2 Special hazards arising from the substance or mixture

Product dust presents a significant explosion hazard. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention if you feel unwell.

### 5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Run-off water contaminated with this material should be contained and prevented from being discharged to any waterway, sewer or drain to prevent environmental contamination.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel from the area. Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition. Ventilate the area. Avoid breathing dust. Do not touch or walk through spilled material.

### 6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers and waterways.

### 6.3 Methods and materials for containment and cleaning up

Approach released material from upwind. Cover drains. Vacuum, shovel or sweep up material and place into an approved, labeled container for proper disposal. Avoid creating dusty conditions and prevent wind dispersal. Observe possible material restrictions (Sections 7.2 and 10.5). Dispose of material via a licensed waste disposal contractor. Clean contaminated area with soap and water.

### 6.4 Reference to other sections

For symptoms of over exposure and first aid treatment, see Section 4.

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Do not get in eyes or on skin and clothing. Avoid creation of dust when handling this product. Prevent dust accumulation.

#### Advice on protection against fire and explosion

Product may present a dust explosion hazard in solid form and is sensitive to ignition by electrostatic discharge. Maintain areas below explosive dust concentrations. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep in cool, dry, ventilated storage areas in closed containers away from incompatible materials (see Section 10), food and drink. Separate from oxidizers, acids and bases. Protect from sunlight. Transfer only to approved containers having correct labeling. Containers that have been opened should be carefully resealed and kept upright to prevent spillage. Do not take internally. Keep out of reach of children.

### 7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Contains no substances with occupational exposure values.

### 8.2 Exposure controls

**Engineering Measures:** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

**Individual protection measures:** Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures:** Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands and forearms thoroughly after use, before eating, drinking or using the lavatory.

**Eye/face protection:** Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

**Hand Protection:** Nitrile rubber, butyl rubber, Neoprene, Viton or PVC gloves are recommended. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period. Recommended breakthrough time: 8 hours.

**Other protective equipment:** Protective clothing. Protective boots, if the situation requires.

**Respiratory Protection:** Always use approved respiratory protection when dust is generated. Where risk assessment shows air-purifying respirators are appropriate, use a dust mask type N95 (USA) or type P1 (EN 143) respirator. Use respirators and components tested and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

NOTE: This material may contain materials classified as nuisance particulates which may be present at hazardous levels during handling, use or accidental release (spillage). If no specific dusts are listed in Section 8, the applicable limits for unknown nuisance dusts are ACGIH TLV 10 mg/m<sup>3</sup> (total dust), 3 mg/m<sup>3</sup> (respirable fraction), OSHA PEL 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

**Environmental exposure controls:** Do not empty into drains.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	White, crystalline powder
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No data available
<b>Molecular Weight</b>	122.13
<b>Chemical Formula</b>	C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O
<b>pH</b>	6.0 - 7.5 (ca. 50 g/100 ml water)
<b>Freezing/Melting Point, Range</b>	128 - 131°C (262 - 268°F)
<b>Initial Boiling Point</b>	224°C (435°F) at 20 hPa
<b>Evaporation Rate</b>	No data available
<b>Flammability (solid, gas)</b>	Not classified as supporting combustion according to transport regulations.
<b>Flash Point</b>	182°C (360°F) Tag Open Cup
<b>Autoignition Temperature</b>	No self-ignition observed in the Greiner oven at temperatures below melting point.
<b>Decomposition Temperature</b>	>140°C (284°F)
<b>Lower Explosive Limit (LEL)</b>	No data available
<b>Upper Explosive Limit (UEL)</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	1.4
<b>Viscosity</b>	No data available
<b>Solubility in Water</b>	Complete
<b>Partition Coefficient: n-octanol/water</b>	-0.37
<b>Volatiles by Volume @ 70° F</b>	No data available

### 9.2 Other data

No data available

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

No special reactivity has been reported.

Hazardous polymerization does not occur.

### 10.2 Chemical stability

Product is stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Dust may form explosive mixture in air.

### 10.4 Conditions to avoid

Avoid static discharge and dust generation. Avoid contact with incompatible materials.

### 10.5 Incompatible materials

Oxidizing agents, strong acids, strong bases

### 10.6 Hazardous decomposition products

Thermal decomposition products include cyanide and nitrogen oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute Oral Toxicity

LD<sub>50</sub>, Rat: 3,500 mg/kg

LD<sub>50</sub>, Mouse: 2,500 mg/kg

#### Acute inhalation toxicity

No data available

#### Acute dermal toxicity

LD<sub>50</sub>, Rabbit: >2,000 mg/kg

#### Skin irritation

Not irritating to skin

#### Eye irritation

Causes mild to moderate eye irritation. May cause mechanical abrasion of cornea.

**Sensitization**

No data available

**Genotoxicity**

Not genotoxic

**Mutagenicity**

No data available

**Specific organ toxicity - single exposure**

No data available

**Specific organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Further information**

No component of this product is present at levels greater than or equal to the 0.1% threshold (de minimis) is identified as a probable, possible, potential or confirmed carcinogen by ACGIH, IARC, NTP or OSHA.

Persons with pre-existing skin, liver or kidney disorders may be at increased risk from chronic overexposure to this material.

Handle in accordance with good industrial hygiene and safety practice.

**SECTION 12 - ECOLOGICAL INFORMATION****12.1 Toxicity**

**Acute and prolonged toxicity to fish:** LC50 - Peocila reticulata (Guppy), 96 h: >1,000 mg/l  
**Toxicity to aquatic invertebrates:** EC50 - Daphnia magna (Water flea), 24 h: >1,000 mg/l  
**Toxicity to aquatic plants:** EC50 - Scenedesmus subspicatus (Algae), 72 h: >1,000 mg/l

**12.2 Persistence and degradability**

Material is expected to be readily biodegradable.

**12.3 Bioaccumulation potential**

Based on the Partition Coefficient this product is not expected to bioaccumulate.

**12.4 Mobility in soil**

This material is soluble in water; therefore, mobility in soil is expected to be high. Absorption to soil and sediment should not be significant.

**12.5 Results of PBT and vPvB assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic. It is not considered to be very persistent nor very bioaccumulating.

**12.6 Other adverse effects****Additional ecological information**

Do not allow material to run into surface waters, wastewater or soil.

**SECTION 13 - DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

**Methods of disposal:** The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Hazardous waste:** The classification of this product may meet the criteria for a hazardous waste.

**SECTION 14 - TRANSPORT INFORMATION**

**Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

**This material is not regulated for transport.**

**Marine Pollutant:** This product is not a marine pollutant.

**SECTION 15 - REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for substance or mixture****U. S. Federal Regulations**

**OSHA Hazard Communication Standard:** This material is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard (28 CFR 1910.1200).

**TSCA Status:** All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

**Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** This product does not contain any chemical components which are subject to the reporting requirements of Section 311/312 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA 313 Information:** None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** No components of the product are subject to the reporting requirements of these sections of Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** No components of the product exceed the threshold (de minimis) reporting levels for hazardous wastes established by CERCLA.

**Clean Air Act (CAA)**

This product does not contain any chemicals listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b).  
 This product does not contain any Class 1 Ozone depletors.  
 This product does not contain any Class 2 Ozone depletors.

**Clean Water Act (CWA)**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
 None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
 None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**U.S. State Regulations**

**California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:**

This product contains no chemical(s) known to the State of California to cause cancer or other reproductive harm.

**Other U.S. State Inventories:**

The components of this product are not listed on any State Hazardous Substance/Air Pollutants Inventories or Right-to-Know lists.

**Canada**

**WHMIS Hazard Symbol and Classification:** No data available.

**Canadian Controlled Products Regulations (CPR):** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

**Canadian National Pollutant Release Inventory (NPRI):** Components of this product are not listed on the NPRI.

**Canadian Ingredient Disclosure List (IDL):** Components of this product are not listed on the IDL.

**European Economic Community**

**Labeling (67/548/EEC to 1999/45/EC)**



Xn - Harmful

**Risk Phrases:** R36 - Irritating to eyes

**Safety Phrases:** S2 - Keep out of the reach of children.

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

**WGK, Germany (Water danger/protection):** 1

**Chemical inventory Lists**

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL).	Yes
Canada:	Non-Domestic Substance List (NDSL).	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

\*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

\*"No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16 - OTHER INFORMATION**

**Hazardous Material Information System (HMIS)**

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	C

**HMIS and NFPA Hazard Rating Legend**

\* = Chronic Health Hazard      2 = MODERATE  
 0 = INSIGNIFICANT                3 = HIGH  
 1 = SLIGHT                            4 = EXTREME



**National Fire Protection Association (NFPA)**

**Flammability**



The information herein is given in good faith and is believed to be accurate and correct; however, no warranty, expressed or implied, is made. Quo Vademus, LLC assumes no responsibility for personal injury or property damage that may arise from the use of this material since the conditions of handling and use are beyond our control. It is the responsibility of the user to comply with all Federal, State and local laws and regulations regarding use of this product. Vendees or users assume all risks associated with the use of this material.

Preparation date: 04 February 2013