

## MATERIAL SAFETY DATA SHEET

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Version 1.5

## Section 1 - Product and Company Information

Product Name NICOTINIC ACID FREE ACID  
Product Number N4126  
Brand SIGMA

Company Sigma-Aldrich Canada, Ltd  
Street Address 2149 Winston Park Drive  
City, State, Zip, Country Oakville ON L6H 6J8 CA  
Technical Phone: 9058299500  
Emergency Phone: 800-424-9300  
Fax: 9058299292

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313 No
NICOTINIC ACID	59-67-6	No

Formula C6H5NO2

Synonyms Acide nicotinique (French) \* Acidum nicotinicum \* Akotin \* Anti-pellagra vitamin \* Apelagrín \* Bionic \* 3-Carboxypyridine \* Daskil \* Davitamon PP \* Direktan \* Efacin \* Kyselina nikotinová (Czech) \* NAH \* Niacin \* Nicacid \* Nicangin \* NICO \* Nico-400 \* Nicobid \* Nicocap \* Nicocidin \* Nicocrisina \* Nicodan \* Nicodelmine \* Nicolar \* Niconacid \* Niconat \* Niconazid \* Nicosan 3 \* Nico-span \* Nicosyl \* Nicotamin \* Nicotene \* Nicotil \* Nicotine acid \* Nicotinipca \* Nicotinoylhydrazine \* Nicotinsäure (German) \* Nicovasan \* Nicovasen \* Nicyl \* Nipellen \* Pellagramin \* Pellagra preventive factor \* Pellagrín \* Pelonin \* Peviton \* PP factor \* P.P. factor-pellagra preventive factor \* Pyridine-3-carbonic acid \* Pyridine-beta-carboxylic acid \* Pyridine-3-carboxylic acid \* 3-Pyridinecarboxylic acid \* Pyridine-carboxylique-3 (French) \* S115 \* SK-Niacin \* SR 4390 \* Tinic \* Vitaplex N \* Wampocap

RTECS Number: QT0525000

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Irritant.

Irritating to eyes, respiratory system and skin.

## HMIS RATING

HEALTH: 2

FLAMMABILITY: 0

REACTIVITY: 0

NFPA RATING  
HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

For additional information on toxicity, please refer to Section 11.

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#### Section 4 - First Aid Measures

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##### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

##### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

##### DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

##### EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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#### Section 5 - Fire Fighting Measures

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##### FLASH POINT

379.4 °F    193 °C    Method: closed cup

##### EXPLOSION LIMITS

Lower: 25 %

##### AUTOIGNITION TEMP

N/A

##### FLAMMABILITY

N/A

##### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

##### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Emits toxic fumes under fire conditions.

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#### Section 6 - Accidental Release Measures

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##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

##### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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#### Section 7 - Handling and Storage

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##### HANDLING

User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Suitable: Keep tightly closed.

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#### Section 8 - Exposure Controls / PPE

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##### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

##### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

##### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

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#### Section 9 - Physical/Chemical Properties

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Appearance	Physical State: Solid	
	Color: White	
	Form: Powder	
Property	Value	At Temperature or Pressure
Molecular Weight	123.11 AMU	
pH	3.4	
BP/BP Range	N/A	
MP/MP Range	234 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	1.473 g/cm <sup>3</sup>	
Bulk Density	500 - 700 kg/l	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	Log Kow: -0.59	25 °C
Decomposition Temp.	N/A	
Flash Point	379.4 °F 193 °C	Method: closed cup
Explosion Limits	Lower: 25 %	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water: 15 mg/ml H <sub>2</sub> O Solvent: Slightly Soluble. Other Solvents: ETHER	

N/A = not available

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#### Section 10 - Stability and Reactivity

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## STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## Section 11 - Toxicological Information

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### ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

### SIGNS AND SYMPTOMS OF EXPOSURE

Overexposure to nicotinic acid can produce a powerful peripheral vasodilating action. This effect is seen as an intense flushing of the skin and occurs about 15 to 60 minutes after exposure. It is accompanied by a sense of warmth, tingling, and itching of the skin and subsides gradually over a period of 15 to 30 minutes. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### CONDITIONS AGGRAVATED BY EXPOSURE

May produce reversible liver damage

### TOXICITY DATA

Oral

Rat

> 5,000 mg/kg

LD50

Skin

Rat

> 2,000 mg/kg

LD50

Oral

Rat

7000 mg/kg

LD50

Intraperitoneal

Rat

730 MG/KG

LD50

Subcutaneous

Rat

5 GM/KG

LD50

Oral

Mouse

3720 mg/kg

LD50  
Remarks: Behavioral:Change in motor activity (specific assay).  
Lungs, Thorax, or Respiration:Other changes.

Intraperitoneal  
Mouse  
358 MG/KG  
LD50

Subcutaneous  
Mouse  
3500 MG/KG  
LD50

Intravenous  
Mouse  
5 GM/KG  
LD50

Oral  
Rabbit  
4550 mg/kg  
LD50

#### IRRITATION DATA

Eyes  
Rabbit  
4 HR  
Remarks: Moderate irritation effect  
Skin  
Rabbit  
4 HR.  
Remarks: No irritation effect

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#### Section 12 - Ecological Information

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No data available.

#### ACUTE ECOTOXICITY TESTS

Test Type: LC50 Fish  
Species: Onchorhynchus mykiss (Rainbow trout)  
Time: 96 h  
Value: 520 mg/l

Test Type: EC50 Daphnia  
Species: Daphnia magna  
Time: 48 h  
Value: 77 mg/l

Test Type: EC50 Algae  
Species: Scenedesmus subspicatus  
Time: 96 h  
Value: 68 mg/l

Test Type: EC50 Algae  
Species: other microorganisms  
Time: 16 h  
Value: 120 mg/l

Test Type: EC50 Algae  
Species: Scenedesmus subspicatus  
Time: 72 h

Value: 90 mg/l

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## Section 13 - Disposal Considerations

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### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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## Section 14 - Transport Information

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### DOT

Proper Shipping Name: None  
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

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## Section 15 - Regulatory Information

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### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xi  
Indication of Danger: Irritant.  
R: 36/37/38  
Risk Statements: Irritating to eyes, respiratory system and skin.  
S: 26 36  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Irritant.  
Risk Statements: Irritating to eyes, respiratory system and skin.  
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No  
TSCA INVENTORY ITEM: Yes

### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
DSL: Yes  
NDSL: No

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## Section 16 - Other Information

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### DISCLAIMER

For R&D use only. Not for drug, household or other uses.

### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to

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