

MATERIAL SAFETY DATA SHEET

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Version 1.6

Section 1 - Product and Company Information

Product Name NICOTINIC ACID FREE ACID
Product Number N4126
Brand SIAL

Company Sigma-Aldrich
Address 3050 Spruce Street
SAINT LOUIS MO 63103 US

Technical Phone: 800-325-5832
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Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

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

Formula C₆H₅N₀₂

Synonyms Acide nicotinique (French) * Acidum nicotinicum * Akotin * Anti-pellagra vitamin * Apelagrin * Bionic * 3-Carboxypyridine * Daskil * Davitamon PP * Direktan * Efacin * Kyselina nikotinova (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 * Nicotinsaure (German) * Nicovasan * Nicovasen * Nicyl * Nipellen * Pellagramin * Pellagra preventive factor * Pellagrins * Pelonin * Peviton * PP factor * P.P. factor-pellagra preventive factor * Pyridine-3-carboxylic 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.

Section 4 - First Aid Measures

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.

Section 5 - Fire Fighting Measures

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.

Section 6 - Accidental Release Measures

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.

Section 7 - Handling and Storage

HANDLING

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

STORAGE

Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

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

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

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 ³	
Bulk Density	500.0 - 700.0 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: - 0.590	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 ₂ O	
	Solvent: Slightly. Soluble.	
	Other Solvents: ETHER	

N/A = not available

Section 10 - Stability and Reactivity

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

Section 11 - Toxicological Information

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. 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.

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

Section 12 - Ecological Information

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

Section 13 - Disposal Considerations

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.

Section 14 - Transport Information

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.

Section 15 - Regulatory Information

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

Section 16 - Other Information

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 appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.