Material Safety Data Sheet

Version 4.5 Revision Date 08/08/2012 Print Date 12/24/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Nicotinic acid

Product Number : N4126

Brand : Sigma-Aldrich

Supplier : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # (For : (314) 776-6555

both supplier and

manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Irritant

GHS Classification

Acute toxicity, Dermal (Category 5)

Eye irritation (Category 2A)

Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram

(!)

Signal word Warning

Hazard statement(s)

H313 May be harmful in contact with skin. H319 Causes serious eye irritation.

H402 Harmful to aquatic life.

Precautionary statement(s)

P264 Wash skin thoroughly after handling. P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

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

P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 2 Flammability: 1 Physical hazards: 0 **NFPA Rating**

Health hazard: 2 Fire: 1 Reactivity Hazard: 0

Potential Health Effects

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Pyridine-3-carboxylic acid

Pellagra preventive factor

3-Picolinic acid

Niacin Vitamin B3

Formula : C6H5NO2 Molecular Weight : 123.11 g/mol

Component		Concentration
Nicotinic acid		
CAS-No.	59-67-6	-
EC-No.	200-441-0	

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Light sensitive. Keep in a dry place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Immersion protection Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 480 min

Material tested:Dermatril® (Aldrich Z677272, Size M)

Splash protection Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 30 min

Material tested:Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form powder

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Colour white

Safety data

pH 3.4 at 10 g/l at 20 °C (68 °F)

Melting point/range: 236 - 239 °C (457 - 462 °F) - lit.

point/freezing point

Boiling point no data available

Flash point 193 °C (379 °F) - closed cup

Ignition temperature > 365 °C (> 689 °F) Autoignition no data available

temperature

no data available

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available

Density 1.467 g/cm3 at 20 °C (68 °F)

Water solubility 15 g/l at 20 °C (68 °F) 150 g/l at 100 °C (212 °F)

Partition coefficient: log Pow: -0.590 at 25 °C (77 °F)

n-octanol/water

Solubility in other

Ethanol 12.5 g/l at 25 °C

Relative vapour

density

solvents

no data available

Odour odourless

Odour Threshold no data available

Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral - rat - 7,000 mg/kg

Inhalation LC50

no data available

Dermal LD50

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LD50 Dermal - rat - > 2,000 mg/kg

Other information on acute toxicity

LD50 Intraperitoneal - rat - 730 mg/kg

LD50 Subcutaneous - rat - 5,000 mg/kg

Skin corrosion/irritation

Skin - rabbit - No skin irritation - 4 h - OECD Test Guideline 404

Serious eye damage/eye irritation

Eyes - rabbit - Moderate eye irritation - OECD Test Guideline 405

Respiratory or skin sensitization

Maximisation Test - guinea pig - OECD Test Guideline 406 - Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Genotoxicity in vitro - Ames test - S. typhimurium - negative

Genotoxicity in vitro - Chromosome aberration test in vitro - Other cell types - negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

Reversible liver enzyme abnormalities.

Synergistic effects

no data available

Additional Information

RTECS: QT0525000

12. ECOLOGICAL INFORMATION

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Toxicity

Toxicity to fish mortality LC50 - Oncorhynchus mykiss (rainbow trout) - 520 mg/l - 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia

Immobilization EC50 - Daphnia magna (Water flea) - 77 mg/l - 48 h

and other aquatic invertebrates

Method: DIN 38412

Toxicity to algae Growth inhibition IC50 - Desmodesmus subspicatus (green algae) - 90 mg/l - 72 h

Method: OECD Test Guideline 201

Toxicity to bacteria Growth inhibition IC50 - Pseudomonas putida - 120 mg/l - 72 h

Persistence and degradability

Biodegradability Biotic/Aerobic

Result: 100 % - Readily biodegradable.

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

Irritant

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

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Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No.

Nicotinic acid 59-67-6

New Jersey Right To Know Components

CAS-No. **Revision Date**

Revision Date

Nicotinic acid 59-67-6

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information

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