1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers
Product name: Nicotinic acid
Product Number: N4126
Brand: Sigma-Aldrich
CAS-No.: 59-67-6

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
Company: Sigma-Aldrich Chemie BV
Stationsplein 4
3331 LL ZWIJNDRECHT
NETHERLANDS
Telephone: +31 78-620-5411
Fax: +31 78-620-5421
E-mail address: eurtechserv@sial.com

1.4 Emergency telephone number
Emergency Phone #: 112

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Eye irritation (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Irritating to eyes.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram

Signal word: Warning
Hazard statement(s)
H319 Causes serious eye irritation.

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

Supplemental Hazard Statements: none


Hazard symbol(s)
R-phrase(s)  
R36   
In irritating to eyes.

S-phrase(s)  
S26  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>Synonyms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyridine-3-carboxylic acid</td>
<td></td>
</tr>
<tr>
<td>Pellagra preventive factor</td>
<td></td>
</tr>
<tr>
<td>3-Picolinic acid</td>
<td></td>
</tr>
<tr>
<td>Niacin</td>
<td></td>
</tr>
<tr>
<td>Vitamin B3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Formula</th>
<th>C6H5NO2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>123.11 g/mol</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotinic acid</td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>59-67-6</td>
</tr>
<tr>
<td>EC-No.</td>
<td>200-441-0</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice  
Consult a physician. Show this safety data sheet to the doctor in attendance.

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.

4.2 Most important symptoms and effects, both acute and delayed  
Reversible liver enzyme abnormalities.

4.3 Indication of any immediate medical attention and special treatment needed  
no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)  
Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information  
no data available
6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 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.

6.3 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.

6.4 Reference to other sections
For disposal see section 13.

7. HANDLING AND STORAGE

7.1 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.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

7.3 Specific end uses
no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

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

Personal protective equipment

Eye/face 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 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 480 min
Material tested:Dermatrix® (Aldrich Z677272, Size M)

Splash protection
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: > 30 min
Material tested: Dermatrix® (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.

**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.

**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).

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 **Information on basic physical and chemical properties**

a) Appearance Form: powder
Colour: white

b) Odour odourless

c) Odour Threshold no data available

d) pH 3.4 at 10 g/l at 20 °C

e) Melting point/freezing point Melting point/range: 236 - 239 °C - lit.

f) Initial boiling point and boiling range no data available

g) Flash point 193 °C - closed cup

h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data available

l) Vapour density no data available

m) Relative density 1.467 g/cm3 at 20 °C

n) Water solubility 15 g/l at 20 °C 150 g/l at 100 °C

o) Partition coefficient: n-octanol/water log Pow: -0.590 at 25 °C

p) Autoignition temperature no data available

q) Decomposition temperature no data available

r) Viscosity no data available

s) Explosive properties no data available

t) Oxidizing properties no data available

9.2 **Other safety information**
10. STABILITY AND REACTIVITY

10.1 Reactivity
no data available

10.2 Chemical stability
no data available

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 7,000 mg/kg
LD50 Dermal - rat - > 2,000 mg/kg
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.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects
Inhalation  May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion  May be harmful if swallowed.
Skin  May be harmful if absorbed through skin. May cause skin irritation.
Eyes  Causes serious eye irritation.

Signs and Symptoms of Exposure
Reversible liver enzyme abnormalities.

Additional Information
RTECS: QT0525000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish  mortality LC50 - Oncorhynchus mykiss (rainbow trout) - 520 mg/l - 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates  Immobilization EC50 - Daphnia magna (Water flea) - 77 mg/l - 48 h
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

12.2 Persistence and degradability

Biodegradability  Biotic/Aerobic - Exposure time 14 d
Result: 100 % - Readily biodegradable.

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
Harmful to aquatic life.
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: -  IMDG: -  IATA: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
14.3 Transport hazard class(es)  
ADR/RID: -  
IMDG: -  
IATA: -

14.4 Packaging group  
ADR/RID: -  
IMDG: -  
IATA: -

14.5 Environmental hazards  
ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no

14.6 Special precautions for user  
no data available

15. REGULATORY INFORMATION  
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
no data available

15.2 Chemical Safety Assessment  
no data available

16. OTHER INFORMATION  
Further information  
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