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

Name: Niacin
Product code: 02
Company name: Nexchem Ltd
Unit 1 Underwood Court
Elm Tree Avenue
Glenfield
Leicester
Leicestershire
LE3 8SG
Tel: 0116 2311130
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Emergency Tel: +44 (0) 116 2877916 or +44 (0) 7714 303742 (24 Hours)
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:
Classification according to regulation (EC) No 1272/2008

H315: Causes skin irritation.
H320: Causes eye irritation.

Classification according to Directive 67/548/ECC or Directive 1999/45/EC

Xi: Irritant
R36: Irritating to eyes.

Information concerning particular hazards for human and environment: Void

Label elements:
Labelling according to regulation (EU) No 1272/2008: The substance is classified and labelled according to the CLP regulation.
Signal word: Warning
Hazard determining components of labelling: Void

Hazard Statements:
H302: Harmful if swallowed.
H313: May be harmful in contact with skin.
H315: Causes skin irritation.
H320: Causes serious eye irritation.
H332: May be harmful if inhaled.
H335: May cause respiratory tract irritation.
Chronic: Not available.

Precautionary statements:
P210: Keep away from heat/sparks/open flames/not surfaces. No smoking.
P261: Avoid breathing dust.
P262: Do not get in eyes, on skin or on clothing.
P264: Wash hands, eyes and face thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/clothing and eyes/face protection.

Response:
P302+P352: If on skin, wash with plenty of soap and water.
P314: Get medical advice/attention if you feel unwell.
P332+P313: If skin irritation occurs. Get medical advice/attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuing rinsing.
P337+P313: If eye irritation persists. Seek medical advice/attention.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Nicotinic acid/ 3 Pyridine-carboxylic Acid
Labelling according to EU statutory order on dangerous substances: Xi: Irritating
Synonyms: Vitamin B3, Vitamin PP
Empirical formula: C₆H₅NO₂
Molar mass: 123.1g/mol.
CAS no.: 59-67-6
EINCES no.: 200-441-0
Risk phrases: R36: Irritating to eyes.
Safety phrases: S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.
4. FIRST AID MEASURES (SYMPTOMS)

General information: Remove contaminated or saturated clothing at once.

Upon inhalation: Breathe fresh air. In case of remaining complaints seek medical advice.

Following skin contact: Wash well with water and soap. In case of remaining complaints seek medical advice.

Following eye contact: Flush with plenty of water for at least 15 minutes. In case of remaining complaints seek medical advice.

Information for doctor: Most important symptoms and effects, both acute and delayed: No further relevant information available. Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Carbon dioxide (CO₂) extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol resistant foam.

Unsuitable extinguishing agents: Water with a full water jet.

Special hazards arising from the substance or mixture:
Can be released in case of fire: Nitrogen Oxides (NOx), Carbon Monoxide (CO), and Carbon Dioxide (CO₂).
Under certain fire conditions, traces of other toxic gases cannot be excluded.

Advice for fire-fighters:
Protective equipment: Wear self-contained breathing apparatus.
Additional information: Cool endangered containers with water spray jet.
Dispose of fire debris and contaminated fire fighting water with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Individual precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Wear protective equipment and keep away unprotected persons.
Avoid contact with skin and eyes.
Avoid breathing dust.
Remove all ignition sources.

Environmental precautions: Hand over spilled material to recycling or to waste disposal.

Procedure of cleaning/take up: Take up by mechanical means, avoid dust formation.

Reference to other sections: See section 7 for information on safe handling.
See section 8 for information on personal protective equipment.
See section 13 for information on disposal.

[cont...]
7. HANDLING AND STORAGE

Storage:
- P402: Store in a dry place.
- P404: Store in a closed container.
- P405: Store locked up.
- P410: Protect from sun.
- P235: Keep cool.
- P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Information about protection against explosions and fires:
- P243: Take precautionary measures against static discharge.
- P211: Do not spray on an open flame or other ignition source.

Handling precautions for safe handling:
- P271: Ensure good ventilation/exhaustion at the workplace.
- P262: Avoid contact with skin and eyes.
- P261: Avoid breathing dust.
- Prevent formation of dust.
  Any deposit of dust which cannot be avoided must be removed regularly.
  Make sure that all applicable workplace limits are observed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Further information for construction of plants: Apply local exhaust ventilation.
This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential build-up of static electricity.

Exposure controls:
Personal protective equipment:
General protective measures: Keep away from foodstuffs, beverages and food.
Instantly removes any contaminated garments.
Wash hands during breaks and at the end of work.
Use skin protective cream for preventive skin protection.
Do not eat, drink or smoke while working.

Breathing equipment: Use breathing protection in case of dust formation.
If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

[cont...]
**Protection of hands:**
Protective gloves. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Check the permeability prior to each renewed use of the glove. To avoid skin problems reduce the wearing of gloves to the required minimum. Due to missing tests no recommendation can be given for the product/ the preparation/ the chemical mixture.

**Materials of gloves:**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**
Protective gloves should be replaced at first signs of wear. The exact break through time has to be found out by the manufacturer of the protect gloves and has to be observed.

**Eye protection:**
Tightly sealed safety glasses.

**Body protection:**
Protection work clothing. Protective clothing should be selected specifically for the working place.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical form</td>
<td>Powder/ granules</td>
</tr>
<tr>
<td>Colour</td>
<td>White-off white</td>
</tr>
<tr>
<td>Odour</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point/ melting range</td>
<td>234-238°C</td>
</tr>
<tr>
<td>Boiling point/ boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Ignition point</td>
<td>Not available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>Not available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>App. 550 kg/m³</td>
</tr>
<tr>
<td>Solubility in water (20°C)</td>
<td>13-15 g/l (20°C)</td>
</tr>
<tr>
<td>pH value (50 g/1.20°C)</td>
<td>3.2-3.3</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under the conditions mentioned in chapter 7.</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No decomposition if used according to specifications. Avoid impact, friction, heat, sparks and electrostatic charges.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Light/ humidity.</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Acids, bases (hydrolysis), strong oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Nitrogen oxides (NOx), Carbon monoxide (CO) and carbon dioxide (CO₂).</td>
</tr>
<tr>
<td>Note</td>
<td>Drying operations at the lowest temperatures possible.</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Acute toxicity:

LD₅₀ oral, rat: 3530 mg/kg (limit-test, OECD 401)

LD₅₀ dermal, rabbit: >2000 mg/kg (limit-test OECD 34402) Prim, irritation

Skin, rabbit: Not irritating (OECD 404)

Eye, rabbit: Irritating (OECD 405) Gen toxicity

 Ames test: Positive and negative (salmonella typhimurium)

Gen toxicity in vitro: Positive and negative (mutagen test with various end points)

Gen toxicity in vitro: Negative (mouse, OECD 474) substance or chronic toxicity

Rat, oral, 28 day test, subacute: NOEL: 215 mg/kg (OCED 407)

Cancerogenity: No tumours (mouse 110 weeks)

Tetratogenity/embryo toxicity: Not known until yet

12. ECOLOGICAL INFORMATION

Ready biodegradability: Readily biodegradable, 96%, 28 days (modified OECD screening test, OECD No.301 E)

Ecotoxicity: Barely toxic for fish (guppy) LC₅₀ (96h) >1000mg/l

 Barely toxic for planktonic crustaceans (daphnia magna) EC₅₀ (48h) >1000mg/l

 Barely toxic for micro-organisms (vorticella campanula) NOEC 3500 mg/l

 Barely toxic for algae (green algae) EbC₅₀ (72h) >1000mg/l

Air pollution: Observe local/national regulations.

13. DISPOSAL CONSIDERATIONS

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

It is considered to be non-hazardous for transport by road/rail/sea/air and not regulated by ADR/RID/IMDG/IATA.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture.

Labelling according to Regulation (EC) No. 1272/2008

The substance is classified and labelled according to CLP regulation.

Hazard pictograms:

GHS07

Signal word: Warning

Hazard-determining components of labelling: Void

Hazard statement: H320: Causes eye irritation [cont...]
Precautionary statements:

P280: Wear protective gloves/protective clothing/eye protection/face protection

P262: Do not get in eyes, on skin or on clothing

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 advice/attention.

National regulations information about limitation of use: Employment restrictions concerning young persons must be observed.

Decree to be applied in case of technical fault:

Water hazard class: Water hazard class 1 (self-assessment): slightly hazardous for water

Chemical safety assessment: A chemical safety assessment has not been carried out.

Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user’s attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Legal disclaimer: The information contained in this SDS does not constitute a risk assessment, and should not replace the user’s own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.