SAFETY DATA SHEET

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name | Nicotinic Acid
Product code | 144-01231,142-01232,146-01235
CAS RN | 59-67-6
Formula | C6H5NO2
Manufacturer | FUJIFILM Wako Pure Chemical Corporation
              | 1-2 Doshomachi 3-Chome
              | Chuo-ku, Osaka 540-8605, Japan
              | Phone: +81-6-6203-3741
              | Fax: +81-6-6203-5964
Supplier | FUJIFILM Wako Pure Chemical Corporation
          | 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan
          | Phone: +81-6-6203-3741
          | Fax: +81-6-6203-2029
Emergency telephone number | +81-6-6203-3741 / +81-3-3270-8571
Recommended uses and restrictions on use | For research purposes

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture
Serious eye damage/eye irritation | Category 2A
Aquatic environment (acute hazard) | Category 3

Pictograms

Signal word | Warning

Hazard statements
- H319 - Causes serious eye irritation
- H402 - Harmful to aquatic life

Precautionary statements-(Prevention)
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid release to the environment

Precautionary statements-(Response)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

Precautionary statements-(Storage)
- Not applicable

Precautionary statements-(Disposal)
- Dispose of contents/container to an approved waste disposal plant
Revision Date 27-Nov-2019

Others
Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula C6H5NO2

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>Molecular weight</th>
<th>ENCS</th>
<th>ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotinic acid</td>
<td>98.0</td>
<td>123.11</td>
<td>(5)-731</td>
<td>公表</td>
<td>59-67-6</td>
</tr>
</tbody>
</table>

Impurities and/or Additives: Not applicable

Section 4: FIRST AID MEASURES

Inhalation
Remove to fresh air. If symptoms persist, call a physician.

Skin contact
Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion
Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders
Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media
No information available

Special extinguishing method
No information available

Specific hazards arising from the chemical product
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters
Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions
To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up
Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recovery, neutralization
No information available

Secondary disaster prevention measures
Clean contaminated objects and areas thoroughly observing environmental regulations.
Section 7: HANDLING AND STORAGE

Handling
Technical measures
Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions
Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage
Safe storage conditions
Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

Safe packaging material
Polyethylene, Polypropylene

Incompatible substances
Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSOAL PROTECTION

Engineering controls
In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand-and eye-wash facility. And display their position clearly.

Exposure limits
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment
Respiratory protection
Dust mask
Hand protection
Protection gloves
Eye protection
protective eyeglasses or chemical safety goggles
Skin and body protection
Long-sleeved work clothes

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form
Color
White - nearly white
Appearance
powder or mass
Odor
No data available
pH
2.7
Melting point/freezing point
234-238 °C
Boiling point, initial boiling point and boiling range
No data available
Flash point
No data available
Evaporation rate:
No data available
Flammability (solid, gas):
No data available
Upper/lower flammability or explosive limits
Upper :
No data available
Lower :
No data available
Vapour pressure
No data available
Vapour density
No data available
Specific Gravity / Relative density
No data available
Solubilities
n-Octanol/water partition coefficient:(log Pow)
No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (coefficient of viscosity) No data available
Dynamic viscosity No data available

### Section 10: STABILITY AND REACTIVITY

**Stability**
May be altered by light. Has sublimation.

**Reactivity**
No data available

**Hazardous reactions**
None under normal processing

**Conditions to avoid**
Extremes of temperature and direct sunlight

**Incompatible materials**
Strong oxidizing agents

**Hazardous decomposition products**
Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

### Section 11: TOXICOLOGICAL INFORMATION

#### Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotinic acid</td>
<td>7 g/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rat)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Skin irritation/corrosion**
No data available

**Serious eye damage/ irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Reproductive cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
No data available

**STOT-single exposure**
No data available

**STOT-repeated exposure**
No data available

**Aspiration hazard**
No data available

### Section 12: ECOLOGICAL INFORMATION

#### Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotinic acid</td>
<td>EC50:Desmodesmus subspicatus 89.93 mg/L 72 h</td>
<td>LC50:Salmo trutta 520 mg/L 96 h</td>
<td>EC50:Daphnia magna 77 mg/L 48 h</td>
</tr>
</tbody>
</table>

**Other data**
No data available

**Persistence and degradability**
No information available

**Bioaccumulative potential**
No information available

**Mobility in soil**
No information available

**Hazard to the ozone layer**
No information available

### Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated container and contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

---

### Section 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>UN number</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proper shipping name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UN classification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsidiary hazard class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packing group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marine pollutant</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMDG</th>
<th>UN number</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proper shipping name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UN classification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsidiary hazard class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packing group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marine pollutant (Sea)</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IATA</th>
<th>UN number</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proper shipping name:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UN classification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Subsidiary hazard class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Packing group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally Hazardous Substance</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

---

### Section 15: REGULATORY INFORMATION

**International Inventories**

- EINECS/ELINCS: Listed
- TSCA: Listed

**Japanese regulations**

- Fire Service Act: Not applicable
- Poisonous and Deleterious Substances Control Law: Not applicable
- Industrial Safety and Health Act: Not applicable
- Regulations for the carriage and storage of dangerous goods in ship: Not applicable
- Civil Aeronautics Law: Not applicable
- Pollutant Release and Transfer Register Law: Not applicable
- Export Trade Control Order: Not applicable

---

### Section 16: OTHER INFORMATION

**Key literature references and sources for data etc.**

- NITE: National Institute of Technology and Evaluation (JAPAN)
- IATA dangerous Goods Regulations
- RTECS: Registry of Toxic Effects of Chemical Substances
- Japan Industrial Safety and Health Association GHS Model SDS
- Chemical Dictionary, Kyoritsu Publishing Co., Ltd.
etc

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
GHS Classification is according to JIS Z7252(2014). *JIS: Japanese Industrial Standards

End of Safety Data Sheet