1. CHEMICAL PRODUCT & MANUFACTURER’S DETAILS

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>6-Hydroxynicotinic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACTORY &amp; REGISTERED OFFICE:</td>
<td>Jubilant Organosys Limited, Bhartagram, Gajraula District: Jyotiba Phuley Nagar Uttar Pradesh-244223, India PHONE NO: +91-5924-252353 upto 60 Contact Department-Safety: Extension 7424 FAX NO : 91-5924-252352 EMERGENCY PHONE: +91-5924-268141</td>
</tr>
<tr>
<td>HEAD OFFICE:</td>
<td>Jubilant Organosys Limited Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh-201301 India PHONE NO: +91-120-2516601 Contact department: EHS FAX NO : +91-120-2516629 Email: <a href="mailto:support@jubl.com">support@jubl.com</a></td>
</tr>
</tbody>
</table>

2. CHEMICAL IDENTIFICATION

- CHEMICAL NAME: 6-Hydroxynicotinic acid
- SYNONYMS: 2-Pyridone-5-carboxylic acid
- SYSTEMATIC NAME: 3-Pyridinecarboxylic acid, 1,6-dihydro-6-oxo- (9CI+) Nicotinic acid, 1,6-dihydro-6-oxo- (8CI)
- NAMES REGIONAL:
  - De: 6-Hydroxynicotinsäure
  - Es: ácido 6-hidroxinicotínico
  - Fr: acide 6-hydroxynicotinique
- CHEMICAL CLASSIFICATION: Pyridinecarboxylate derivative
- CHEMICAL FORMULA: C₆H₅NO₃
- C.A.S. NO: 5006-66-6
- EINECS: 225-682-9

3. HAZARD IDENTIFICATION & HEALTH HAZARD

- Irritant: Irritant.
- Eye: Causes eye irritation.
- Skin: Causes skin irritation.
- Ingestion: Causes digestive tract irritation.
- Inhalation: Causes respiratory tract irritation.
- The toxicological properties of this substance have not been fully investigated.
4. **FIRST AID MEASURES**

| **Eye Contact:** | Wash thoroughly with running water for at least 15 minutes. Get prompt medical advice. |
| **Skin Contact:** | Wash exposed area with soap and water. Get medical advice if irritation develops. |
| **Inhalation:** | Remove to fresh air and get medical attention for any breathing difficulty. |
| **Ingestion:** | In case of large amount of ingestion, give water or milk to drink and get medical advice |

5. **FIRE FIGHTING MEASURES**

| **Melting Point:** | 310°C dec. This product is classified as non-combustible but like any organic chemical will burn in presence of a fire. NFPA estm. H1 F0 R0 |
| **Extinguishing media:** | Water spray, carbon dioxide, dry chemical powder, chemical foam. |
| **Special fire fighting procedures:** | As in any chemical fire wear a self-contained breathing apparatus MSHA/NIOSH (or equivalent approved) and full protective gloves. Do not permit water to get inside containers. Do not permit the chemical/ fire effluent to enter the environment as far as possible. |
| **Unusual fire and explosion hazard:** | During combustion irritant or toxic fumes of carbon monoxide, nitrogen oxides and hydrogen cyanide may be emitted. |

6. **ACCIDENTAL RELEASE MEASURES**

- **General Information:** Use proper personal protective equipment as indicated in Section 8
- **Spills / Leaks:** Sweep up dry and place in suitable container. Provide ventilation after clean up.

7. **HANDLING AND STORAGE**

- **Handling:** Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Wash thoroughly after usage.
- **Storage:** Store in a cool, dry place. Store in a tightly closed container.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

- **Exposure controls:** Use adequate ventilation to keep airborne concentrations low.
- **Personal Protection**
  - **Eye protection:** Use goggles and/or facemask.
  - **Hand:** Use appropriate gloves.
  - **Skin:** Wear suitable protective clothing.
  - **Respirator:** Wear appropriate approved respirator where conditions demand.
- **Exposure Limits**
  - Not available. ACGIH, OSHA, NIOSH listing not available.
9. PHYSICOCHEMICAL PROPERTIES & FIRE/EXPLOSION HAZARD

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICAL STATE</td>
<td>White to off-white powder</td>
</tr>
<tr>
<td>ODOUR</td>
<td>Not significant</td>
</tr>
<tr>
<td>BOILING POINT</td>
<td>Not available</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>310 deg C (dec.)</td>
</tr>
<tr>
<td>OCTONOL/WATER Log Pow</td>
<td>0.960 (estm.)</td>
</tr>
<tr>
<td>EXPLOSIVE LIMITS</td>
<td></td>
</tr>
<tr>
<td>UEL</td>
<td>Not available</td>
</tr>
<tr>
<td>LEL</td>
<td>Not available</td>
</tr>
<tr>
<td>FLASH POINT</td>
<td>Not available</td>
</tr>
<tr>
<td>FLAMMABLE MATERIAL</td>
<td>No</td>
</tr>
<tr>
<td>PYROPHORIC MATERIAL</td>
<td>No</td>
</tr>
<tr>
<td>EXPLOSIVE MATERIAL</td>
<td>No</td>
</tr>
<tr>
<td>ORGANIC PEROXIDE</td>
<td>No</td>
</tr>
<tr>
<td>MOLECULAR WEIGHT</td>
<td>139.11</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

- **Stability:** Stable under normal temperatures and pressure.
- **Conditions to Avoid:** Incompatible substances.
- **Incompatibilities:** Strong oxidizing agents.
- **Hazardous decomposition products:** Oxides of nitrogen, carbon monoxide and irritating and toxic gases may be released in presence of a fire.
- **Hazardous Polymerization:** Not expected.

11. TOXICOLOGICAL INFORMATION

- **ACUTE EFFECTS:** Not available.
- **CHRONIC EFFECTS:** Not available.
- **TOXICITY:**
  - RTECS#: 5006-66-6
  - ORL RAT LD50: Not available
- **CARCINOGENICITY:** NTP, IARC, OSHA-not listed. Not known to be carcinogenic.

12. ECOLOGICAL INFORMATION

- **Ecotoxicity:** Not available
- **Biodegradation:** Not available
- **Bioaccumulation:** Not likely (See Log Pow value in section 9)

13. DISPOSAL CONSIDERATION

- Dispose in a manner consistent with local and federal laws and regulations.

14. TRANSPORT INFORMATION

Not regulated under IMO/IMDG/US DOT/IATA.
15. REGULATORY INFORMATION

European Information: EC#225-682-9
  Pictogram: Xi
  Indication of danger: Irritant
  Risk Phrases
  • R 36/37/38 Irritating to eyes, respiratory system and skin.
  Safety Phrases
  • S 24/25 Avoid contact with skin and eyes.
  • S 36 Wear suitable protective clothing.
  • S 37 Wear suitable gloves.

US Regulatory Information
TSCA
• CAS# 59-67-6 is listed on the EPA TSCA Section 8 (b) Chemical inventory.
• Health & Safety Reporting List: CAS# 59-67-6 is not on the Health & Safety Reporting List.
• Chemical Test Rules: CAS# 59-67-6 is not under a Chemical Test Rule.
• Section 12b: CAS# 59-67-6 is not listed under TSCA Section 12b.
• TSCA Significant New Use Rule: CAS# 59-67-6 does not have a SNUR under TSCA.
SARA
• SECTION 304 (RQ): None of the chemicals in this material have an RQ.
• SECTION 302 (TPQ): None of the chemicals in this product have a TPQ.
• SECTION 313: No chemicals are reportable under section 313.
Clean Air Act:
• This material does not contain any hazardous air pollutants (HAPs).
• This material does not contain any Class 1 or Class 2 Ozone depletors.
Clean Water Act:
• None of the chemicals in this product are listed as Hazardous Substances under the CWA.
• None of the chemicals in this product are listed as Priority Pollutants under the CWA.
• None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

Canada CAS# 59-67-6
DSL: Yes (Pub.date: May 4, 1994)

16. OTHER INFORMATION
Information contained in this MSDS is believed to be correct but no representation, guarantee or
warranties of any kind are made as to its accuracy, suitability for a particular application or results to
be obtained from them. This MSDS shall be used as a guide only. JUBILANT ORGANOSYS
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particular purpose.
Document Name: 0220A00 Div 05 msds 6-Hydroxynicotinic acid
Date: February 12, 2005
Revision Number: 00