# Product Specification

**PIPERIDINE FOR SYNTHESIS**

## PRODUCT CODE
192185

## SYNonyms
Hexahydropyridine

## C.I. NO.
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## CASR NO.
(110-89-4)

## ATOMIC OR MOLECULAR FORMULA
C₅H₁₁N

## ATOMIC OR MOLECULAR WEIGHT
85.15

## PROPERTIES

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Clear and colourless liquid with characteristic odor.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water.</td>
</tr>
<tr>
<td>Minimum assay (GC)</td>
<td>98.0%</td>
</tr>
<tr>
<td>Wt. per ml(at 20 °C)</td>
<td>0.861-0.863 g</td>
</tr>
<tr>
<td>Refractive index (n)₀</td>
<td>1.4520-1.4540</td>
</tr>
<tr>
<td>Boiling range</td>
<td>105-107 °C</td>
</tr>
</tbody>
</table>

## MAXIMUM LIMIT OF IMPURITY

<table>
<thead>
<tr>
<th>Impurity</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>0.5%</td>
</tr>
<tr>
<td>Pyridine</td>
<td>0.3%</td>
</tr>
<tr>
<td>Iron(Fe)</td>
<td>0.0001%</td>
</tr>
</tbody>
</table>

Note(s): Assay (if applicable) method mentioned.

## DANGER

### HAZARD STATEMENTS:
Flammable liquid and vapour. Combustible Liquid. Toxic if inhaled. Harmful if swallowed. May be corrosive to metals. Causes severe skin burns and eye damage.

### PRECAUTIONARY STATEMENTS:

**Prevention:** Keep away from flames and hot surfaces. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mist. Use explosion-proof electrical/ventilating/lighting/equipment. Wash thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Use only outdoors or in a well ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.

**Response:** Call a POISON CENTER or doctor/physician if you feel unwell. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Keep container tightly closed. Immediately call a POISON CENTER or doctor/physician. If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/shower. In case of fire, use alcohol-type foam for extinction. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of fire, use dry agent for extinction. Specific treatment: refer to Label or MSDS. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

**Disposal:** Add in small quantities to large, stirred excess of water, keeping the final concentration less than 2%. Neutralize with 5% sodium hydroxide soln. and run to waste with large quantities of running water.

**Hazard Pictogram(s):**

- Flammable liquids
- Corrosive to metals
- Acute toxicity

**IMDG Code:**

**UN No.:**

**IATA:**

Revised Date 22-11-2016