Product Name: Metformin hydrochloride
Catalog No.: 2864
Batch No.: 2

CAS Number: 1115-70-4
EC Number: 214-230-6

IUPAC Name: N,N-Dimethylimidodicarbonimidic diamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄H₁₁N₅.HCl
Batch Molecular Weight: 165.62
Physical Appearance: White solid
Solubility: water to 100 mM
DMSO to 50 mM
Storage: Store at RT

2. ANALYTICAL DATA

Melting Point: Between 224 - 225°C
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<tbody>
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<td>7.26</td>
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</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Metformin hydrochloride

CAS Number: 1115-70-4

IUPAC Name: N,N-Dimethylimidocarbonimidic diamide hydrochloride

Catalog No.: 2864

Batch No.: 2

EC Number: 214-230-6

Description:
Antidiabetic agent; lowers plasma glucose levels and improves insulin sensitivity. Inhibits hepatic gluconeogenesis via activation of the LKB1/AMPK pathway. Displays antiproliferative effects in cancer cell lines. Activates the aPKC-CBP pathway in neural precursors to promote neurogenesis. Activates autophagy.

Physical and Chemical Properties:
Batch Molecular Formula: C_{14}H_{11}N_{5}HCl
Batch Molecular Weight: 165.62
Physical Appearance: White solid

Storage: Store at RT

Solubility & Usage Info:
- water to 100 mM
- DMSO to 50 mM

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:


