

# *Chem-Impex International, Inc.*

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**Manufacturing site:**

825 Dillon Drive

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## *Certificate of Analysis*

<b>Catalogue Number</b>	01450
<b>Lot Number</b>	002479-201609001
<b>Product</b>	<b>D(+)-Glucosamine hydrochloride</b> 2-Amino-2-deoxy-D-glucopyranose hydrochloride
<b>CAS Number</b>	66-84-2
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>13</sub> NO <sub>5</sub> •HCl
<b>Molecular Weight</b>	215.64

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<b>Appearance</b>	White crystalline powder
<b>Heavy Metals</b>	< 10 ppm
<b>Anion</b>	Sulfate (SO <sub>4</sub> <sup>2-</sup> ): < 0.24%
<b>Cation</b>	Arsenic (As): < 3 ppm
<b>pH</b>	4.4
<b>Yeast and Mold</b>	< 100 CFU/g
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = +71.6° (C=2.5)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Loss on Drying</b>	0.09%
<b>Bacterial Endotoxins</b>	< 1000 CFU/g
<b>E. Coli</b>	Negative
<b>Salmonella</b>	Negative
<b>Residue On Ignition</b>	0.05%
<b>Purity by HPLC</b>	99.8% (anhydrous basis)
<b>Grade</b>	USP
<b>Storage</b>	Store at RT
<b>Additional Information</b>	Identification: To pass test for chlorides

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**Lot Number: 002479-201609001**

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**Remarks**

See material safety data sheet for additional information

For laboratory use only

**The foregoing is a copy of the Certificate of Analysis as provided by our supplier**



**Bala Kumar**  
**Quality Control Manager**