Chem-Impex International, Inc.

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935 Dillon Drive
Wood Dale, IL 60191

825 Dillon Drive
Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 21932

Lot Number 002095-20120920

Product β-Arbutin

 $\hbox{$4$-Hydroxyphenyl-$\beta$-D-glucopyranoside}$

CAS Number497-76-7Molecular Formula $C_{12}H_{16}O_7$ Molecular Weight272.25

AppearanceWhite crystalline powderSolubilityTransparent, colorless

Melting Point199-201 °CHeavy Metals< 10 ppm</th>Arsenic (As2O2)< 2 ppm</th>

pH 6.30 (1% in Water)

Optical Rotation $[a]_D^{20} = -66.4^{\circ}$

Infrared Spectrum Conforms to structure

Loss on Drying< 0.5%</th>Residue On Ignition< 0.5%</th>Purity99.80%

Storage Store at 0-8 °C

Additional Information Hydroquinone: < 10 ppm

Bacterial microorganism: 20 cfu/g

Mold: 20 cfu/g

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