

# Chem-Impex International, Inc.

---

Tel: (630) 766-2112

E-mail: sales@chemimpex.com

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site:

825 Dillon Drive

Wood Dale, IL 60191

---

## Certificate of Analysis

**Catalogue Number** 06853  
**Lot Number** 818821  
**Product** **S-4-Methylbenzyl-D-penicillamine**

D-Pen(pMeBzl)-OH

H- $\beta$ , $\beta$ -Dimethyl-D-Cys(pMeBzl)-OH

**Molecular Formula** C<sub>13</sub>H<sub>19</sub>NO<sub>2</sub>S

**Molecular Weight** 253.2

---

**Appearance** White powder

**Melting Point** Foams at 170.1 °C

**Elemental Analysis (Theory)** C = 61.63%; H = 7.56%; N = 5.53%; S = 12.66%

**Elemental Analysis (Found)** C = 61.56%; H = 7.51%; N = 5.50%; S = 12.57%

**TLC System** n-BuOH/AcOH/H<sub>2</sub>O (4:1:1)  
n-BuOH/AcOEt/AcOH/H<sub>2</sub>O (1:1:1:1)  
CHCl<sub>3</sub>/MeOH/AcOH/H<sub>2</sub>O (60:18:3:3)  
Plate: silicagel 60 F<sub>254</sub>  
Detected by: UV, ninhydrin, ceric-molybdate

**Optical Rotation** [α]<sub>D</sub><sup>22</sup> = -66.2° (C=2 in AcOH)

**Purity by HPLC** > 98%

**Storage** Store at 0-8 °C

# *Certificate of Analysis*

Catalog Number: 06853

Lot Number: 818821

---

**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**