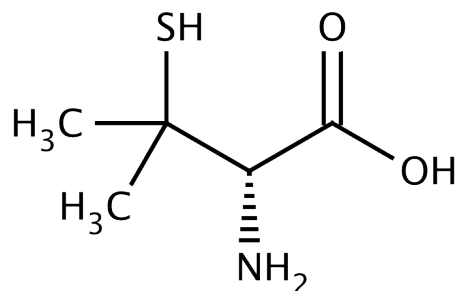


## Product Specification

Product Name : D-Penicillamine, USP grade  
Glentham Code : GA5612  
CAS Number : 52-67-5  
EINECS : 200-148-8  
MDL Number : MFCD00064302  
PubChem SID : 310278558

Molecular Weight : 149.21  
Molecular Formula : C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>S  
Storage Temp. : +4°C



Property	Specification
Physical Description	White to off-white powder or solid
Assay	97.0 - 102.0 %
Specific Optical Rotation	-60.5 - -64.5 °
pH	4.5 - 5.5
Loss on Drying	≤ 0.5%
Residue on Ignition	≤ 0.1%
Heavy Metals	≤ 20ppm
Mercury (Hg)	≤ 20ppm
Limit of Penicillin Activity	≤ 200IU/mg
Organic Impurities	Penicillamine disulfide: ≤1.0%
Residual Solvents	n-Butanol: ≤ 5000ppm, Methanol: ≤ 3000ppm
Pharmacopoeia Specification(s)	USP

Specification Version : v1.0  
Date Created : 2014-04-10

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

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