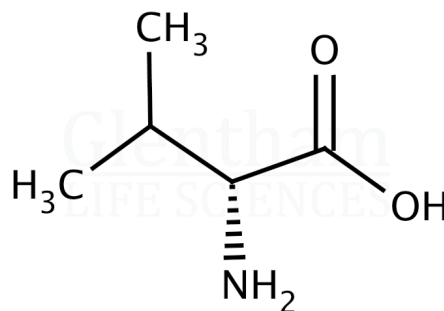


## Certificate of Analysis

|                |              |
|----------------|--------------|
| Product Name   | D-Valine     |
| Glenthams Code | GM5893       |
| CAS Number     | 640-68-6     |
| EINECS         | 211-368-9    |
| MDL Number     | MFCD00064219 |
| PubChem SID    | 310281626    |
| Batch Number   | 863XVT       |

|                   |                                                |
|-------------------|------------------------------------------------|
| Molecular Weight  | 117.15                                         |
| Molecular Formula | C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub> |
| Storage Temp.     | +20°C                                          |



| Property                                         | Specification              | Batch 863XVT               |
|--------------------------------------------------|----------------------------|----------------------------|
| Physical Description                             | White crystalline powder   | White crystalline powder   |
| Solubility (5% in water)                         | Clear, colourless solution | Clear, colourless solution |
| Specific Optical Rotation ([α] <sub>20/D</sub> ) | -25.0 - -29.0 °            | -27.6 °                    |
| Residue on Ignition                              | ≤ 0.20%                    | 0.05%                      |
| Heavy Metals (as Pb)                             | ≤ 10ppm                    | Conforms                   |
| Loss on Drying                                   | ≤ 0.5%                     | 0.21%                      |
| Assay                                            | 98.0 - 101.0 %             | 99.7%                      |

|                       |            |
|-----------------------|------------|
| Specification Version | v1.1       |
| Manufacture Date      | 2019-04-13 |
| Re-Test Date          | 2028-09-20 |

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

This document was generated electronically and is therefore valid without signature. © Glenthams Life Sciences Ltd, 2025