

Analytical Data Sheet

Lot number **1057883**
not for drug use

Catalog number **F-1645.0005**
Product number **4001785.0005**
Product **D- α - Hydroxyisovaleric acid**
Molecular formula **C₅H₁₀O₃**
Relative molecular mass **118.13**

Tests	Results								
Appearance	slightly yellow crystals								
Appearance of solution	clear, colorless solution (50 mg/ml in MeOH)								
Identification (elemental analysis)	<table> <thead> <tr> <th>Theory</th> <th>Found</th> </tr> </thead> <tbody> <tr> <td>C = 50.5 %</td> <td>C = 50.4 %</td> </tr> <tr> <td>H = 8.6 %</td> <td>H = 8.6 %</td> </tr> <tr> <td>N = - %</td> <td>N = - %</td> </tr> </tbody> </table> <p>calc. x 0.05 H₂O</p>	Theory	Found	C = 50.5 %	C = 50.4 %	H = 8.6 %	H = 8.6 %	N = - %	N = - %
Theory	Found								
C = 50.5 %	C = 50.4 %								
H = 8.6 %	H = 8.6 %								
N = - %	N = - %								
Identification (TLC)	complies with authentic material								
Melting point	62 °C								
Specific optical rotation	$[\alpha]_D^{24} = -16.6^\circ$ (2 % in chloroform)								
Purity (TLC)	> 99%								
TLC conditions	chloroform/methanol/acetic acid/H ₂ O 70/42/0.5/10 ethylacetate/pyridine/acetic acid/H ₂ O 60/10/3/4 chloroform/methanol/acetic acid/H ₂ O 45/13/1/2 plate: silicagel 60 F ₂₅₄ detected by: UV, ninhydrin, chlorine-tolidine, ammoniummolybdate								
Water content (KF volumetric)	0.8%								