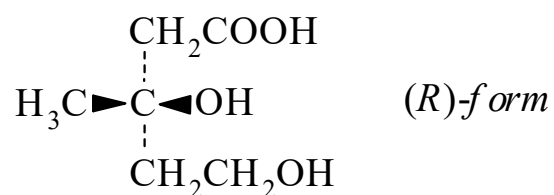




>>Entry Name: 3,5-Dihydroxy-3-methylpentanoic acid

Synonym(s): Mevalonic acid. Hiochic acid



CAS Registry Number: 150-97-0

Molecular Formula: C₆H₁₂O₄

Molecular Weight: 148.158

Accurate Mass: 148.07356

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

>>Variant: (R)-form

CAS Registry Number: 17817-88-8

Molecular Formula: C₆H₁₂O₄

Molecular Weight: 148.158

Accurate Mass: 148.07356

Percentage Composition: C 48.64%; H 8.16%; O 43.20%

Biological Source: Intermed. in biosynth. of terpenoids and steroids

Physical Description: Oil

>>Derivative: 5-Phosphate

Synonym(s): 5-Phosphomevalonic acid

CAS Registry Number: 73566-35-5

Molecular Formula: C₆H₁₃O₇P

Molecular Weight: 228.138

Accurate Mass: 228.039892

Percentage Composition: C 31.59%; H 5.74%; O 49.09%; P 13.58%

Biological Source: Isol. from various plants and microorganisms

Use/Importance: Active form of mevalonic acid

Melting Point: Mp 152-154° (as tris-cyclohexylammonium salt)

>>Derivative: 5-Diphosphate

CAS Registry Number: 1492-08-6

Molecular Formula: C₆H₁₄O₁₀P₂

Molecular Weight: 308.118

Accurate Mass: 308.006224

Percentage Composition: C 23.39%; H 4.58%; O 51.93%; P 20.11%

Biological Source: Intermed. in terpene biosynth.

Physical Description: Oil

>>Derivative: 5-Diphosphate, dibrucine salt

Physical Description: Cryst. + 6H₂O (Me₂CO aq.)

Melting Point: Mp 173-175°

>>Derivative: δ-Lactone

Synonym(s): Tetrahydro-4-hydroxy-4-methyl-2H-pyran-2-one, 9CI. **Mevalonolactone**. Divalonic acid

CAS Registry Number: 19115-49-2

Extra CAS Registry Numbers(s): 503-48-0

Molecular Formula: C₆H₁₀O₃

Molecular Weight: 130.143

Accurate Mass: 130.062995

Percentage Composition: C 55.37%; H 7.74%; O 36.88%

Use/Importance: In equilibrium with mevalonic acid, well incorporated into terpenes and steroids

Physical Description: Cryst.

Melting Point: Mp 28°

Boiling Point: Bp_{0.005} 100-108°

Optical Rotation: [α]