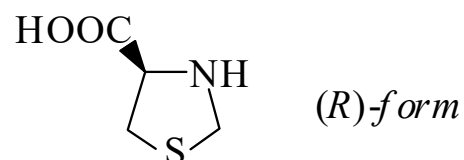




>>Entry Name: 4-Thiazolidinecarboxylic acid

ENTRY UNDER REVIEW

Synonym(s): Thioproline. **Timonacic**, INN. γ -Thiaproline. Heparegen. NSC 25855. Many other names



CAS Registry Number: 444-27-9

Related CAS Registry Numbers(s): 45521-09-3

Molecular Formula: $C_4H_7NO_2S$

Molecular Weight: 133.171

Accurate Mass: 133.019749

Percentage Composition: C 36.08%; H 5.30%; N 10.52%; O 24.03%; S 24.08%

Use/Importance: Masked deriv. of Cysteine [HJQ86-N](#) useful in resoln.

Biological Use/Importance: An adjuvant for treatment of hepatic disorders, psoriasis, acne

pKa Value: pK_{a1} 1.51; pK_{a2} 6.21 (25°)

Hazard & Toxicity: Human systemic effects by ingestion incl. somnolence, tremors, altered renal function. LD₅₀ (rat, orl) 875 mg/kg

>>Variant: (*R*)-form

Synonym(s): L-form

CAS Registry Number: 34592-47-7

Molecular Formula: $C_4H_7NO_2S$

Molecular Weight: 133.171

Accurate Mass: 133.019749

Percentage Composition: C 36.08%; H 5.30%; N 10.52%; O 24.03%; S 24.08%

Physical Description: Needles (H₂O)

Melting Point: Mp 196-197 dec.°. Mp 205-209°

Optical Rotation: $[\alpha]_D^{20}$ -141 (c, 1.3 in H₂O). $[\alpha]_D^{22}$ -100 (1M HCl). $[\alpha]_D$ -203 (1M NaOH)

Aldrich: T2750-2

Fluka: 88400

Sigma: T0631

>>Derivative: Hydrochloride

CAS Registry Number: 67089-84-3

Physical Description: Prisms (dil. HCl)

Melting Point: Mp 184-185 dec.°

>>Derivative: Me ester

CAS Registry Number: 42258-90-2

Molecular Formula: $C_5H_9NO_2S$

Molecular Weight: 147.198

Accurate Mass: 147.035399

Percentage Composition: C 40.80%; H 6.16%; N 9.52%; O 21.74%; S 21.78%

Boiling Point: Bp₁ 75°

Optical Rotation: $[\alpha]_D^{23}$ -83 (H₂O). $[\alpha]_D^{21}$ -106.3 (C₆H₆)

>>Derivative: Me ester; hydrochloride

CAS Registry Number: 65983-36-0

Physical Description: Plates (MeOH/Et₂O)

Melting Point: Mp 164-165 dec.°

>>Derivative: *N*-Carbethoxy