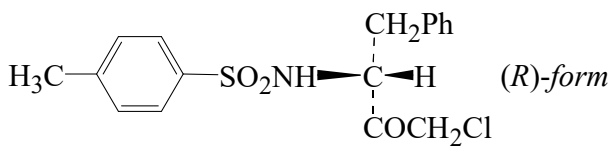
>>**Entry Name: *N*-[3-Chloro-2-oxo-1-(phenylmethyl)propyl]-4-methylbenzenesulfonamide,** 9Cl
Synonym(s): *N*-[α-(Chloroacetyl)phenethyl]-*p*-toluenesulfonamide, 8Cl. TPCK



(*R*)-*form*

CAS Registry Number: 329-30-6

Molecular Formula: $C_{17}H_{18}ClNO_3S$
Molecular Weight: 351.853
Accurate Mass: 351.069591
Percentage Composition: C 58.03%; H 5.16%; Cl 10.08%; N 3.98%; O 13.64%; S 9.11%

>>**Variant:** (*R*)-form
Synonym(s): D-form

CAS Registry Number: 18945-32-9
Molecular Formula: $C_{17}H_{18}ClNO_3S$
Molecular Weight: 351.853
Accurate Mass: 351.069591
Percentage Composition: C 58.03%; H 5.16%; Cl 10.08%; N 3.98%; O 13.64%; S 9.11%
Melting Point: Mp 103-104°
Optical Rotation: $[\alpha]_D^{25}$–10.1 (c, 3.56 in $CHCl_3$)

>>**Variant:** (*S*)-form
Synonym(s): L-form

CAS Registry Number: 402-71-1
Molecular Formula: $C_{17}H_{18}ClNO_3S$
Molecular Weight: 351.853
Accurate Mass: 351.069591
Percentage Composition: C 58.03%; H 5.16%; Cl 10.08%; N 3.98%; O 13.64%; S 9.11%
Use/Importance: Inhibitor of chymotrypsin, papain and *E. coli* proteases. Inactive against trypsin
Melting Point: Mp 103-104°
Optical Rotation: $[\alpha]_D^{20}$–88 (c, 1 in EtOH). $[\alpha]_D^{25}$+9.7 (c, 5 in $CHCl_3$)

References:

Schoellman, G. *et al.*, *Biochemistry*, 1963, **2**, 252-255, *(S·form, synth, biochem)*
Bender, M.L. *et al.*, *J.A.C.S.*, 1966, **88**, 5880-5889, *(biochem)*
Michel, A. *et al.*, *Bull. Soc. Chim. Belg.*, 1980, **89**, 25-32, *(cryst, struct)*