

(2S)-Glycidyl tosylate

Other names:	(2S)-(+)-Glycidyl tosylate
Inchi:	InChI=1S/C10H12O4S/c1-8-2-4-10(5-3-8)15(11,12)14-7-9-6-13-9/h2-5,9H,6-7H2,1H3/t9
InchiKey:	NOQXXYIGRPAZJC-VIFPVBQESA-N
Formula:	C10H12O4S
SMILES:	<chem>Cc1ccc(S(=O)(=O)OCC2CO2)cc1</chem>
Mol. weight [g/mol]:	228.26
CAS:	70987-78-9

Physical Properties

Property code	Value	Unit	Source
gf	-462.81	kJ/mol	Joback Method
hf	-669.44	kJ/mol	Joback Method
hfus	33.99	kJ/mol	Joback Method
hvap	66.26	kJ/mol	Joback Method
log10ws	-1.65		Crippen Method
logp	1.099		Crippen Method
mcvol	156.970	ml/mol	McGowan Method
pc	3891.64	kPa	Joback Method
tb	563.75	K	Joback Method
tc	774.89	K	Joback Method
tf	346.70	K	Joback Method
vc	0.610	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	377.53	J/molxK	563.75	Joback Method
cpg	392.24	J/molxK	598.94	Joback Method
cpg	406.04	J/molxK	634.13	Joback Method
cpg	418.96	J/molxK	669.32	Joback Method
cpg	431.00	J/molxK	704.51	Joback Method
cpg	442.19	J/molxK	739.70	Joback Method
cpg	452.55	J/molxK	774.89	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C70987789&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvp:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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