

# N-(2-Hydroxy-propionyl)-4-methyl-benzenesulfonamide

InChI: InChI=1S/C14H12F7NO5S/c1-7-3-5-9(6-4-7)28(25,26)22-10(23)8(2)27-11(24)12(15,16)13  
InchiKey: CKSMFGOGSNPQSD-UHFFFAOYSA-N

Formula: C14H12F7NO5S

SMILES: Cc1ccc(S(=O)(=O)NC(=O)C(C)OC(=O)C(F)(F)C(F)(F)C(F)(F)F)cc1

Mol. weight [g/mol]: 439.30

## Physical Properties

Property code	Value	Unit	Source
gf	-1929.80	kJ/mol	Joback Method
hf	-2268.79	kJ/mol	Joback Method
hfus	42.33	kJ/mol	Joback Method
hvap	80.67	kJ/mol	Joback Method
log10ws	-4.37		Crippen Method
logp	2.565		Crippen Method
mvol	243.830	ml/mol	McGowan Method
pc	2030.89	kPa	Joback Method
rinpol	1849.00		NIST Webbook
rinpol	1849.00		NIST Webbook
tb	764.25	K	Joback Method
tc	951.30	K	Joback Method
tf	496.18	K	Joback Method
vc	0.990	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	716.62	J/molxK	764.25	Joback Method
cpg	727.43	J/molxK	795.43	Joback Method
cpg	737.29	J/molxK	826.60	Joback Method
cpg	746.25	J/molxK	857.78	Joback Method
cpg	754.36	J/molxK	888.95	Joback Method
cpg	761.68	J/molxK	920.13	Joback Method
cpg	768.24	J/molxK	951.30	Joback Method

# Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=U374249&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=U374249&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

# Legend

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

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