

Hydrazinecarboxaldehyde, 2-(4-methylphenyl)-

Inchi:	InChI=1S/C8H10N2O/c1-7-2-4-8(5-3-7)10-9-6-11/h2-6,10H,1H3,(H,9,11)
InchiKey:	DDPJROKUKMXGPW-UHFFFAOYSA-N
Formula:	C8H10N2O
SMILES:	Cc1ccc(NNC=O)cc1
Mol. weight [g/mol]:	150.18
CAS:	38577-24-1

Physical Properties

Property code	Value	Unit	Source
gf	198.52	kJ/mol	Joback Method
hf	37.97	kJ/mol	Joback Method
hfus	22.62	kJ/mol	Joback Method
hvap	55.93	kJ/mol	Joback Method
log10ws	-1.91		Crippen Method
logp	1.068		Crippen Method
mcvol	121.350	ml/mol	McGowan Method
pc	4056.96	kPa	Joback Method
tb	563.10	K	Joback Method
tc	781.38	K	Joback Method
tf	366.18	K	Joback Method
vc	0.463	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	279.42	J/molxK	563.10	Joback Method
cpg	290.91	J/molxK	599.48	Joback Method
cpg	301.65	J/molxK	635.86	Joback Method
cpg	311.69	J/molxK	672.24	Joback Method
cpg	321.05	J/molxK	708.62	Joback Method
cpg	329.76	J/molxK	745.00	Joback Method
cpg	337.84	J/molxK	781.38	Joback Method

Sources

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=C38577241&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
hvac:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mccol:	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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