Urea, N,N'-di-2-propenyl-

Other names:	Urea, 1,3-diallyl-
	N,N'-Diallylurea
	1,3-Diallylurea
	DAU
	Diallyl-urea
	Sinapoline
Inchi:	InChI=1S/C7H12N2O/c1-3-5-8-7(10)9-6-4-2/h3-4H,1-2,5-6H2,(H2,8,9,10)
InchiKey:	QRWVOJLTHSRPOA-UHFFFAOYSA-N
Formula:	C7H12N2O
SMILES:	C=CCNC(=O)NCC=C
Mol. weight [g/mol]:	140.18
CAS:	1801-72-5

Physical Properties

Property code	Value	Unit	Source
gf	233.60	kJ/mol	Joback Method
hf	57.41	kJ/mol	Joback Method
hfus	23.12	kJ/mol	Joback Method
hvap	49.45	kJ/mol	Joback Method
log10ws	-1.59		Crippen Method
logp	0.658		Crippen Method
mcvol	122.420	ml/mol	McGowan Method
pc	3392.03	kPa	Joback Method
tb	507.13	K	Joback Method
tc	697.35	K	Joback Method
tf	320.38	K	Joback Method
vc	0.466	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	269.17	J/mol×K	507.13	Joback Method
cpg	280.19	J/mol×K	538.83	Joback Method
cpg	290.62	J/mol×K	570.54	Joback Method

cpg	300.49	J/mol×K	602.24	Joback Method
cpg	309.82	J/mol×K	633.94	Joback Method
cpg	318.65	J/mol×K	665.65	Joback Method
cpg	326.98	J/mol×K	697.35	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C1801725&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
hvap:	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