

2-Propenoic acid, 2-(dimethylamino)ethyl ester

Other names:	Dimethylaminoethyl acrylate 2-Dimethylaminoethyl acrylate N,N-Dimethylaminoethyl acrylate Acrylic acid, 2-(dimethylamino)ethyl ester NSC 20952 Adame Ageflex FA-1 2-(N,N-Dimethylamino)ethyl acrylate
Inchi:	InChI=1S/C7H13NO2/c1-4-7(9)10-6-5-8(2)3/h4H,1,5-6H2,2-3H3
InchiKey:	DPBJAVGHACCNRL-UHFFFAOYSA-N
Formula:	C7H13NO2
SMILES:	C=CC(=O)OCCN(C)C
Mol. weight [g/mol]:	143.18
CAS:	2439-35-2

Physical Properties

Property code	Value	Unit	Source
gf	-27.24	kJ/mol	Joback Method
hf	-239.65	kJ/mol	Joback Method
hfus	18.41	kJ/mol	Joback Method
hvap	41.70	kJ/mol	Joback Method
log10ws	-0.04		Crippen Method
logp	0.277		Crippen Method
mcvol	122.610	ml/mol	McGowan Method
pc	3072.75	kPa	Joback Method
tb	444.97	K	Joback Method
tc	623.19	K	Joback Method
tf	271.52	K	Joback Method
vc	0.451	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	252.69	J/molxK	444.97	Joback Method

cpg	264.21	J/mol×K	474.67	Joback Method
cpg	275.25	J/mol×K	504.38	Joback Method
cpg	285.82	J/mol×K	534.08	Joback Method
cpg	295.93	J/mol×K	563.78	Joback Method
cpg	305.58	J/mol×K	593.49	Joback Method
cpg	314.79	J/mol×K	623.19	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	337.20	K	1.60	NIST Webbook

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C2439352&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point

vc: Critical Volume

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