2,4-Decadien-1-ol, (E,E)-

Other names:	(E,E)-2,4-Decadien-1-ol
	trans-2,4-Decadienol
	trans,trans-2,4-Decadienol
	trans-2-trans-4-Decadienol
	(2E,4E)-2,4-Decadien-1-ol
	(E,E)-2,4-Decadienol
	2,4-Decadien-1-ol, (2E,4E)-
Inchi:	InChI=1S/C10H18O/c1-2-3-4-5-6-7-8-9-10-11/h6-9,11H,2-5,10H2,1H3/b7-6+,9-8+
InchiKey:	NUBWFSDCZULDCI-BLHCBFLLSA-N
Formula:	C10H18O
SMILES:	CCCCCC=CC=CCO
Mol. weight [g/mol]:	154.25
CAS:	18409-21-7

Physical Properties

Property code	Value	Unit	Source
gf	56.94	kJ/mol	Joback Method
hf	-167.52	kJ/mol	Joback Method
hfus	26.15	kJ/mol	Joback Method
hvap	54.45	kJ/mol	Joback Method
log10ws	-2.98		Crippen Method
logp	2.671		Crippen Method
mcvol	149.030	ml/mol	McGowan Method
pc	2545.61	kPa	Joback Method
rinpol	1310.00		NIST Webbook
rinpol	1310.00		NIST Webbook
tb	528.70	K	Joback Method
tc	700.08	K	Joback Method
tf	253.12	K	Joback Method
vc	0.575	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source

cpg	344.77	J/mol×K	528.70	Joback Method
cpg	401.38	J/mol×K	671.51	Joback Method
cpg	391.12	J/mol×K	642.95	Joback Method
cpg	380.36	J/mol×K	614.39	Joback Method
cpg	369.07	J/mol×K	585.83	Joback Method
cpg	357.22	J/mol×K	557.26	Joback Method
cpg	411.16	J/mol×K	700.08	Joback Method
dvisc	0.0000851	Pa×s	528.70	Joback Method
dvisc	0.0001440	Pa×s	482.77	Joback Method
dvisc	0.0002723	Pa×s	436.84	Joback Method
dvisc	0.0005979	Pa×s	390.91	Joback Method
dvisc	0.0016185	Pa×s	344.98	Joback Method
dvisc	0.0059497	Pa×s	299.05	Joback Method
dvisc	0.0350795	Pa×s	253.12	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C18409217&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
dvisc: Dynamic viscosity
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
rinpol: Non-polar retention indices
tb: Normal Boiling Point Temperature
tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume