2-Tridecen-1-ol, (e)-

Other names: (2E)-2-Tridecen-1-ol
(Z)-tridec-2-en-1-ol
E-2-Tridecen-1-ol
trans-2-Tridecen-1-ol
Inchi: InChI=1S/C13H26O/c1-2-3-4-5-6-7-8-9-10-11-12-13-14/h11-12,14H,2-10,13H2,1H3/b12-
InchiKey: VPYJHNADOJDSGU-VAWYXSNFSA-N
Formula: C13H26O
SMILES: CCCCCCCCCC/C=C/CO
Mol. weight [g/mol]: 198.35
CAS: 74962-98-4

Physical Properties

Property code	Value	Unit	Source
af	0.7974		Cheméo Relay (1.0)
gf	1.98	kJ/mol	Joback Method
hf	-373.56	kJ/mol	Cheméo Relay (1.0)
hfus	33.72	kJ/mol	Joback Method
hvap	94.16	kJ/mol	Cheméo Relay (1.0)
ie	9.11	eV	Cheméo Relay (1.0)
log10ws	-5.11		Cheméo Relay (1.0)
logp	4.066		Crippen Method
mcvol	195.600	ml/mol	McGowan Method
pc	1854.71	kPa	Joback Method
rinpol	1570.00		NIST Webbook
rinpol	1570.00		NIST Webbook
tb	552.90	K	Cheméo Relay (1.0)
tc	735.70	K	Cheméo Relay (1.0)
tf	300.02	K	Cheméo Relay (1.0)
vc	0.729	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	510.30	J/mol×K	593.18	Joback Method

cpg	590.43	J/mol×K	756.04	Joback Method
cpg	578.48	J/mol×K	728.90	Joback Method
cpg	566.00	J/mol×K	701.75	Joback Method
cpg	552.96	J/mol×K	674.61	Joback Method
cpg	539.35	J/mol×K	647.47	Joback Method
cpg	525.14	J/mol×K	620.32	Joback Method
dvisc	0.0003846	Pa×s	442.60	Joback Method
dvisc	0.0000603	Pa×s	593.18	Joback Method
dvisc	0.0000998	Pa×s	542.99	Joback Method
dvisc	0.0001829	Pa×s	492.79	Joback Method
dvisc	0.0165809	Pa×s	292.01	Joback Method
dvisc	0.0009783	Pa×s	392.40	Joback Method
dvisc	0.0032726	Pa×s	342.20	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.45395e+01
Coeff. B	-4.74446e+03
Coeff. C	-9.56210e+01
Temperature range (K), min.	428.52
Temperature range (K), max.	609.76

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

The Yaws Handbook of Vapor Pressure: https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C74962984&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Legend

af:	Acentric Factor
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
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume