1-Tritriacontene

Inchi: InChI=1S/C33H66/c1-3-5-7-9-11-13-15-17-19-21-23-25-27-29-31-33-32-30-28-26-24-22-
InchiKey: DRJAAODMPBOZLH-UHFFFAOYSA-N
Formula: C33H66
SMILES: C=CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 462.88
CAS: 61868-11-9

Physical Properties

Property code	Value	Unit	Source
gf	314.82	kJ/mol	Joback Method
hf	-599.02	kJ/mol	Joback Method
hfus	79.95	kJ/mol	Joback Method
hvap	88.38	kJ/mol	Joback Method
log10ws	-13.49		Crippen Method
logp	12.895		Crippen Method
mcvol	471.530	ml/mol	McGowan Method
pc	529.93	kPa	Joback Method
rinpol	3288.00		NIST Webbook
rinpol	3288.00		NIST Webbook
tb	951.12	K	Joback Method
tc	1186.34	K	Joback Method
tf	459.91	K	Joback Method
vc	1.865	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1656.31	J/mol×K	951.12	Joback Method
cpg	1686.23	J/mol×K	990.32	Joback Method
cpg	1714.27	J/mol×K	1029.53	Joback Method
cpg	1740.59	J/mol×K	1068.73	Joback Method
cpg	1765.32	J/mol×K	1107.93	Joback Method
cpg	1788.61	J/mol×K	1147.14	Joback Method
cpg	1810.60	J/mol×K	1186.34	Joback Method

dvisc	0.0007138	Pa×s	459.91	Joback Method
dvisc	0.0002372	Pa×s	541.78	Joback Method
dvisc	0.0001053	Pa×s	623.65	Joback Method
dvisc	0.0000564	Pa×s	705.51	Joback Method
dvisc	0.0000344	Pa×s	787.38	Joback Method
dvisc	0.0000231	Pa×s	869.25	Joback Method
dvisc	0.0000165	Pa×s	951.12	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.51171e+01
Coeff. B	-6.31499e+03
Coeff. C	-1.48580e+02
Temperature range (K), min.	574.42
Temperature range (K), max.	792.60

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R250776&Units=SI

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

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

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

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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume