Tricosane, 2,6,10,14,18-pentamethyl

Inchi: InChI=1S/C28H58/c1-8-9-10-16-25(4)18-12-20-27(6)22-14-23-28(7)21-13-19-26(5)17-11
InchiKey: HVOSWHGKDMEVNU-UHFFFAOYSA-N
Formula: C28H58
SMILES: CCCCCC(C)CCCC(C)CCCC(C)CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 394.76

Physical Properties

Property code	Value	Unit	Source
gf	172.68	kJ/mol	Joback Method
hf	-647.65	kJ/mol	Joback Method
hfus	50.66	kJ/mol	Joback Method
hvap	75.98	kJ/mol	Joback Method
log10ws	-10.33		Crippen Method
logp	10.448		Crippen Method
mcvol	405.380	ml/mol	McGowan Method
pc	669.08	kPa	Joback Method
rinpol	2470.00		NIST Webbook
rinpol	2470.00		NIST Webbook
rinpol	2470.00		NIST Webbook
rinpol	2470.00		NIST Webbook
rinpol	2470.00		NIST Webbook
tb	837.84	K	Joback Method
tc	1025.75	K	Joback Method
tf	330.32	K	Joback Method
vc	1.573	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1349.84	J/mol×K	837.84	Joback Method
cpg	1463.09	J/mol×K	994.43	Joback Method
cpg	1442.88	J/mol×K	963.11	Joback Method
cpg	1421.51	J/mol×K	931.80	Joback Method
cpg	1398.92	J/mol×K	900.48	Joback Method

cpg	1375.05	J/mol×K	869.16	Joback Method
cpg	1482.20	J/mol×K	1025.75	Joback Method
dvisc	0.0000212	Pa×s	837.84	Joback Method
dvisc	0.0000322	Pa×s	753.25	Joback Method
dvisc	0.0000546	Pa×s	668.67	Joback Method
dvisc	0.0001077	Pa×s	584.08	Joback Method
dvisc	0.0002673	Pa×s	499.49	Joback Method
dvisc	0.0009612	Pa×s	414.91	Joback Method
dvisc	0.0066589	Pa×s	330.32	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R213866&Units=SI

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