6,6-Diethyldodecane

Inchi: InChI=1S/C16H34/c1-5-9-11-13-15-16(7-3,8-4)14-12-10-6-2/h5-15H2,1-4H3
InchiKey: XYSKVBVUANFUIV-UHFFFAOYSA-N
Formula: C16H34
SMILES: CCCCCCC(CC)(CC)CCCCC
Mol. weight [g/mol]: 226.44

Physical Properties

Property code	Value	Unit	Source
gf	86.68	kJ/mol	Joback Method
hf	-382.32	kJ/mol	Joback Method
hfus	29.78	kJ/mol	Joback Method
hvap	49.91	kJ/mol	Joback Method
log10ws	-6.28		Crippen Method
logp	6.344		Crippen Method
mcvol	236.300	ml/mol	McGowan Method
pc	1336.86	kPa	Joback Method
rinpol	1498.00		NIST Webbook
tb	562.25	K	Joback Method
tc	728.23	K	Joback Method
tf	272.50	K	Joback Method
vc	0.920	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	614.09	J/mol×K	562.25	Joback Method
cpg	634.19	J/mol×K	589.91	Joback Method
cpg	653.40	J/mol×K	617.58	Joback Method
cpg	671.77	J/mol×K	645.24	Joback Method
cpg	689.32	J/mol×K	672.91	Joback Method
cpg	706.10	J/mol×K	700.57	Joback Method
cpg	722.12	J/mol×K	728.23	Joback Method
dvisc	0.0068269	Pa×s	272.50	Joback Method
dvisc	0.0021907	Pa×s	320.79	Joback Method

dvisc	0.0009465	Pa×s	369.08	Joback Method
dvisc	0.0004966	Pa×s	417.38	Joback Method
dvisc	0.0002978	Pa×s	465.67	Joback Method
dvisc	0.0001966	Pa×s	513.96	Joback Method
dvisc	0.0001394	Pa×s	562.25	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=R415740&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