3,3-Diethylpentacosane

Inchi: InChI=1S/C29H60/c1-5-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-2
InchiKey: GGDNWWULUCRBCO-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCCCCCCCCCCCCCCCCCCCC(CC)(CC)CC
Mol. weight [g/mol]: 408.79

Physical Properties

Property code	Value	Unit	Source
gf	196.14	kJ/mol	Joback Method
hf	-650.64	kJ/mol	Joback Method
hfus	63.45	kJ/mol	Joback Method
hvap	78.85	kJ/mol	Joback Method
log10ws	-11.72		Crippen Method
logp	11.415		Crippen Method
mcvol	419.470	ml/mol	McGowan Method
pc	630.35	kPa	Joback Method
rinpol	2877.00		NIST Webbook
tb	859.69	K	Joback Method
tc	1054.01	K	Joback Method
tf	419.01	K	Joback Method
vc	1.649	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1414.48	J/mol×K	859.69	Joback Method
cpg	1440.26	J/mol×K	892.08	Joback Method
cpg	1464.69	J/mol×K	924.46	Joback Method
cpg	1487.87	J/mol×K	956.85	Joback Method
cpg	1509.87	J/mol×K	989.24	Joback Method
cpg	1530.78	J/mol×K	1021.62	Joback Method
cpg	1550.67	J/mol×K	1054.01	Joback Method
dvisc	0.0012285	Pa×s	419.01	Joback Method
dvisc	0.0003820	Pa×s	492.46	Joback Method

dvisc	0.0001609	Pa×s	565.90	Joback Method
dvisc	0.0000826	Pa×s	639.35	Joback Method
dvisc	0.0000487	Pa×s	712.80	Joback Method
dvisc	0.0000317	Pa×s	786.24	Joback Method
dvisc	0.0000222	Pa×s	859.69	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R415191&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