Pentadecane, 8,8-diheptyl-

Inchi: InChI=1S/C29H60/c1-5-9-13-17-21-25-29(26-22-18-14-10-6-2,27-23-19-15-11-7-3)28-24
InchiKey: HTCXHZFBQFHUBG-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCCCC(CCCCCCC)(CCCCCCC)CCCCCCC
Mol. weight [g/mol]: 408.79
CAS: 55268-72-9

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
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

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=C55268729&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
tb: Normal Boiling Point Temperature
tc: Critical Temperature
tf: Normal melting (fusion) point
vc: Critical Volume