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:	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
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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

Latest version available from:

https://www.chemeo.com/cid/64-822-8/Pentadecane-8-8-diheptyl.pdf

Generated by Cheméo on 2024-10-12 04:47:00.613232082 +0000 UTC m=+3289283.250201329.

Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.