

5,5-Diethylpentacosane

Inchi: InChI=1S/C29H60/c1-5-9-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-28-29(7-3,
InchiKey: GOIPNGYCMCNHBI-UHFFFAOYSA-N
Formula: C29H60
SMILES: CCCCCCCCCCCCCCCCCCCCCC(CC)(CC)CCCC
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
mvol	419.470	ml/mol	McGowan Method
pc	630.35	kPa	Joback Method
rinpol	2815.00		NIST Webbook
rinpol	2815.00		NIST Webbook
tb	859.69	K	Joback Method
tc	1054.01	K	Joback Method
tf	419.01	K	Joback Method
vc	1.649	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1414.48	J/molxK	859.69	Joback Method
cpg	1440.26	J/molxK	892.08	Joback Method
cpg	1464.69	J/molxK	924.46	Joback Method
cpg	1487.87	J/molxK	956.85	Joback Method
cpg	1509.87	J/molxK	989.24	Joback Method
cpg	1530.78	J/molxK	1021.62	Joback Method
cpg	1550.67	J/molxK	1054.01	Joback Method
dvisc	0.0012285	Paxs	419.01	Joback Method

dvisc	0.0003820	Paxs	492.46	Joback Method
dvisc	0.0001609	Paxs	565.90	Joback Method
dvisc	0.0000826	Paxs	639.35	Joback Method
dvisc	0.0000487	Paxs	712.80	Joback Method
dvisc	0.0000317	Paxs	786.24	Joback Method
dvisc	0.0000222	Paxs	859.69	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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=R415502&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

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