

7-pentacosene

Inchi: InChI=1S/C25H50/c1-3-5-7-9-11-13-15-17-19-21-23-25-24-22-20-18-16-14-12-10-8-6-4-2
InchiKey: RORWYUWDGGVNRJ-FYWRMAATSA-N
Formula: C25H50
SMILES: CCCCCC=CCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]: 350.66

Physical Properties

Property code	Value	Unit	Source
gf	239.84	kJ/mol	Joback Method
hf	-442.11	kJ/mol	Joback Method
hfus	60.71	kJ/mol	Joback Method
hvap	71.20	kJ/mol	Joback Method
log10ws	-10.14		Crippen Method
logp	9.775		Crippen Method
mcvol	358.810	ml/mol	McGowan Method
pc	786.39	kPa	Joback Method
rinpol	2478.78		NIST Webbook
rinpol	2479.00		NIST Webbook
rinpol	2479.00		NIST Webbook
rinpol	2474.00		NIST Webbook
tb	775.56	K	Joback Method
tc	950.67	K	Joback Method
tf	366.43	K	Joback Method
vc	1.415	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1127.97	J/molxK	775.56	Joback Method
cpg	1150.73	J/molxK	804.74	Joback Method
cpg	1172.45	J/molxK	833.93	Joback Method
cpg	1193.17	J/molxK	863.11	Joback Method
cpg	1212.94	J/molxK	892.30	Joback Method
cpg	1231.81	J/molxK	921.48	Joback Method

cpg	1249.84	J/mol×K	950.67	Joback Method
dvisc	0.0019564	Paxs	366.43	Joback Method
dvisc	0.0006316	Paxs	434.62	Joback Method
dvisc	0.0002771	Paxs	502.81	Joback Method
dvisc	0.0001480	Paxs	570.99	Joback Method
dvisc	0.0000904	Paxs	639.18	Joback Method
dvisc	0.0000607	Paxs	707.37	Joback Method
dvisc	0.0000437	Paxs	775.56	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=R282085&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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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