Hexacosane, 10-methyl

Other names: Hexacosane, 10-methyl
Inchi: InChI=1S/C27H56/c1-4-6-8-10-12-13-14-15-16-17-18-20-22-24-26-27(3)25-23-21-19-11-
InchiKey: OWSBCKGOVFUQEP-UHFFFAOYSA-N
Formula: C27H56
SMILES: CCCCCCCCCCCCCCCCC(C)CCCCCCCCC
Mol. weight [g/mol]: 380.74

Physical Properties

Property code	Value	Unit	Source
af	1.0614		Cheméo Relay (1.0)
gf	174.02	kJ/mol	Joback Method
hf	-612.36	kJ/mol	Cheméo Relay (1.0)
hfus	62.16	kJ/mol	Joback Method
hvap	131.14	kJ/mol	Cheméo Relay (1.0)
ie	9.96	eV	Cheméo Relay (1.0)
log10ws	-10.48		Cheméo Relay (1.0)
logp	10.635		Crippen Method
mcvol	391.290	ml/mol	McGowan Method
pc	691.79	kPa	Joback Method
rinpol	2634.00		NIST Webbook
rinpol	2637.40		NIST Webbook
rinpol	2636.00		NIST Webbook
rinpol	2637.40		NIST Webbook
rinpol	2631.00		NIST Webbook
tb	620.23	K	Cheméo Relay (1.0)
tc	792.17	K	Cheméo Relay (1.0)
tf	294.41	K	Cheméo Relay (1.0)
vc	1.544	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1282.19	J/mol×K	816.72	Joback Method
cpg	1306.88	J/mol×K	847.27	Joback Method

cpg	1330.33	J/mol×K	877.83	Joback Method
cpg	1352.60	J/mol×K	908.38	Joback Method
cpg	1373.74	J/mol×K	938.93	Joback Method
cpg	1393.80	J/mol×K	969.49	Joback Method
cpg	1412.85	J/mol×K	1000.04	Joback Method
dvisc	0.0020683	Pa×s	379.05	Joback Method
dvisc	0.0006041	Pa×s	451.99	Joback Method
dvisc	0.0002484	Pa×s	524.94	Joback Method
dvisc	0.0001269	Pa×s	597.88	Joback Method
dvisc	0.0000750	Pa×s	670.83	Joback Method
dvisc	0.0000492	Pa×s	743.77	Joback Method
dvisc	0.0000347	Pa×s	816.72	Joback Method

Sources

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=R261746&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Legend

af: Acentric Factor
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
ie: Ionization energy
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