

1-Hexacosene

Other names:	hexacos-1-ene
Inchi:	InChI=1S/C26H52/c1-3-5-7-9-11-13-15-17-19-21-23-25-26-24-22-20-18-16-14-12-10-8-6
InchiKey:	OMXANELYEWKDAW-UHFFFAOYSA-N
Formula:	C ₂₆ H ₅₂
SMILES:	C=CCCCCCCCCCCCCCCCCCCCCCCC
Mol. weight [g/mol]:	364.69
CAS:	18835-33-1

Physical Properties

Property code	Value	Unit	Source
gf	255.88	kJ/mol	Joback Method
hf	-454.54	kJ/mol	Joback Method
hfus	61.82	kJ/mol	Joback Method
hvap	72.80	kJ/mol	Joback Method
log10ws	-10.56		Crippen Method
logp	10.165		Crippen Method
mcvol	372.900	ml/mol	McGowan Method
pc	741.64	kPa	Joback Method
rinpol	358.50		NIST Webbook
rinpol	358.50		NIST Webbook
rinpol	2596.00		NIST Webbook
rinpol	2596.00		NIST Webbook
rinpol	2593.00		NIST Webbook
tb	790.96	K	Joback Method
tc	968.46	K	Joback Method
tf	381.02	K	Joback Method
vc	1.472	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1189.00	J/mol×K	790.96	Joback Method
cpg	1212.39	J/mol×K	820.54	Joback Method
cpg	1234.67	J/mol×K	850.13	Joback Method

cpg	1255.88	J/mol×K	879.71	Joback Method
cpg	1276.08	J/mol×K	909.30	Joback Method
cpg	1295.31	J/mol×K	938.88	Joback Method
cpg	1313.62	J/mol×K	968.46	Joback Method
dvisc	0.0018164	Paxs	381.02	Joback Method
dvisc	0.0006200	Paxs	449.34	Joback Method
dvisc	0.0002811	Paxs	517.67	Joback Method
dvisc	0.0001532	Paxs	585.99	Joback Method
dvisc	0.0000948	Paxs	654.31	Joback Method
dvisc	0.0000643	Paxs	722.64	Joback Method
dvisc	0.0000466	Paxs	790.96	Joback Method
hvapt	106.10	kJ/mol	559.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.29483e+01
Coeff. B	-3.86098e+03
Coeff. C	-2.15474e+02
Temperature range (K), min.	520.43
Temperature range (K), max.	721.05

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=C18835331&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
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
hvapt:	Enthalpy of vaporization at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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