Nonane, 2,6-dimethyl-

Other names: 2,6-Dimethylnonane
Inchi: InChI=1S/C11H24/c1-5-7-11(4)9-6-8-10(2)3/h10-11H,5-9H2,1-4H3
InchiKey: MGNGOEWESNDQAN-UHFFFAOYSA-N
Formula: C11H24
SMILES: CCCC(C)CCCC(C)C
Mol. weight [g/mol]: 156.31
CAS: 17302-28-2

Physical Properties

Property code	Value	Unit	Source
gf	36.86	kJ/mol	Joback Method
hf	-280.93	kJ/mol	Joback Method
hfus	17.20	kJ/mol	Joback Method
hvap	39.30	kJ/mol	Joback Method
log10ws	-3.94		Crippen Method
logp	4.249		Crippen Method
mcvol	165.850	ml/mol	McGowan Method
pc	1961.34	kPa	Joback Method
rinpol	1018.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	1026.00		NIST Webbook
rinpol	1018.00		NIST Webbook
rinpol	1014.00		NIST Webbook
rinpol	1017.00		NIST Webbook
rinpol	1025.00		NIST Webbook
rinpol	1025.00		NIST Webbook
rinpol	1034.00		NIST Webbook
rinpol	1022.00		NIST Webbook
rinpol	1022.00		NIST Webbook
rinpol	1024.00		NIST Webbook
rinpol	1037.00		NIST Webbook
rinpol	1017.00		NIST Webbook
rinpol	1030.00		NIST Webbook
rinpol	1020.00		NIST Webbook
rinpol	1026.00		NIST Webbook
tb	450.20	K	Joback Method

tc	618.81	K	Joback Method
tf	183.73	K	Joback Method
vc	0.639	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	360.12	J/mol×K	450.20	Joback Method
cpg	437.81	J/mol×K	590.71	Joback Method
cpg	423.51	J/mol×K	562.61	Joback Method
cpg	408.60	J/mol×K	534.51	Joback Method
cpg	393.08	J/mol×K	506.40	Joback Method
cpg	376.92	J/mol×K	478.30	Joback Method
cpg	451.53	J/mol×K	618.81	Joback Method
dvisc	0.0002057	Pa×s	450.20	Joback Method
dvisc	0.0002907	Pa×s	405.79	Joback Method
dvisc	0.0004471	Pa×s	361.38	Joback Method
dvisc	0.0007760	Pa×s	316.96	Joback Method
dvisc	0.0016118	Pa×s	272.55	Joback Method
dvisc	0.0044499	Pa×s	228.14	Joback Method
dvisc	0.0200727	Pa×s	183.73	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	ln(Pvp) = A + B/(T + C)
Coeff. A	1.39977e+01
Coeff. B	-3.43943e+03
Coeff. C	-8.54500e+01
Temperature range (K), min.	336.32
Temperature range (K), max.	481.41

Sources

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/ci990307l
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=C17302282&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
pvap:	Vapor pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume