

Undec-9-en-1-al

Inchi:	InChI=1S/C11H20O/c1-2-3-4-5-6-7-8-9-10-11-12/h2-3,11H,4-10H2,1H3/b3-2+
InchiKey:	ZFMUIJVOIVHGCF-NSCUHMNNSA-N
Formula:	C11H20O
SMILES:	CC=CCCCCCCC=O
Mol. weight [g/mol]:	168.28

Physical Properties

Property code	Value	Unit	Source
gf	22.44	kJ/mol	Joback Method
hf	-238.73	kJ/mol	Joback Method
hfus	26.74	kJ/mol	Joback Method
hvap	46.76	kJ/mol	Joback Method
log10ws	-3.56		Crippen Method
logp	3.492		Crippen Method
mcvol	163.120	ml/mol	McGowan Method
pc	2167.36	kPa	Joback Method
rinpol	1308.00		NIST Webbook
rinpol	1308.00		NIST Webbook
tb	503.90	K	Joback Method
tc	678.56	K	Joback Method
tf	250.65	K	Joback Method
vc	0.648	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	371.55	J/mol×K	503.90	Joback Method
cpg	386.13	J/mol×K	533.01	Joback Method
cpg	400.06	J/mol×K	562.12	Joback Method
cpg	413.35	J/mol×K	591.23	Joback Method
cpg	426.04	J/mol×K	620.34	Joback Method
cpg	438.14	J/mol×K	649.45	Joback Method
cpg	449.68	J/mol×K	678.56	Joback Method
dvisc	0.0047920	Paxs	250.65	Joback Method

dvisc	0.0020053	Paxs	292.86	Joback Method
dvisc	0.0010451	Paxs	335.07	Joback Method
dvisc	0.0006302	Paxs	377.27	Joback Method
dvisc	0.0004207	Paxs	419.48	Joback Method
dvisc	0.0003024	Paxs	461.69	Joback Method
dvisc	0.0002297	Paxs	503.90	Joback Method

Sources

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=R303489&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
rin_{pol}:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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