

10-methylundecanol

Inchi:	InChI=1S/C12H26O/c1-12(2)10-8-6-4-3-5-7-9-11-13/h12-13H,3-11H2,1-2H3
InchiKey:	NQDZCRSUOVPTII-UHFFFAOYSA-N
Formula:	C12H26O
SMILES:	CC(C)CCCCCCCCO
Mol. weight [g/mol]:	186.33
CAS:	---

Physical Properties

Property code	Value	Unit	Source
gf	-89.10	kJ/mol	Joback Method
hf	-448.52	kJ/mol	Joback Method
hfus	27.40	kJ/mol	Joback Method
hvap	58.60	kJ/mol	Joback Method
log10ws	-3.87		Crippen Method
logp	3.756		Crippen Method
mcvol	185.810	ml/mol	McGowan Method
pc	1940.65	kPa	Joback Method
rinpol	1443.00		NIST Webbook
rinpol	1447.00		NIST Webbook
tb	565.70	K	Joback Method
tc	725.92	K	Joback Method
tf	270.82	K	Joback Method
vc	0.721	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	478.70	J/mol×K	565.70	Joback Method
cpg	493.60	J/mol×K	592.40	Joback Method
cpg	507.92	J/mol×K	619.11	Joback Method
cpg	521.66	J/mol×K	645.81	Joback Method
cpg	534.85	J/mol×K	672.51	Joback Method
cpg	547.50	J/mol×K	699.22	Joback Method
cpg	559.62	J/mol×K	725.92	Joback Method

dvisc	0.0381702	Paxs	270.82	Joback Method
dvisc	0.0062239	Paxs	319.97	Joback Method
dvisc	0.0016449	Paxs	369.11	Joback Method
dvisc	0.0005944	Paxs	418.26	Joback Method
dvisc	0.0002660	Paxs	467.41	Joback Method
dvisc	0.0001387	Paxs	516.55	Joback Method
dvisc	0.0000810	Paxs	565.70	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.58487e+01
Coeff. B	-4.92640e+03
Coeff. C	-8.53350e+01
Temperature range (K), min.	401.92
Temperature range (K), max.	552.86

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=R213539&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

h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
m_{cvol}:	McGowan's characteristic volume
p_c:	Critical Pressure
p_{vap}:	Vapor pressure
r_{inpol}:	Non-polar retention indices
t_b:	Normal Boiling Point Temperature
t_c:	Critical Temperature
t_f:	Normal melting (fusion) point
v_c:	Critical Volume

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