

10-Undecen-1-ol

Other names:	1-Undecen-11-ol 10-Undecene-1-ol 10-Undecenol 10-Undecylen-1-ol 11-Hydroxy-1-undecene Undec-10-enol Undecylenic alcohol Undecylenyl alcohol undec-10-en-1-ol «omega»-Undecenyl alcohol «omega»-Undecylenyl alcohol Â«omegaÂ»-Undecenyl alcohol Â«omegaÂ»-Undecylenyl alcohol
Inchi:	InChI=1S/C11H22O/c1-2-3-4-5-6-7-8-9-10-11-12/h2,12H,1,3-11H2
InchiKey:	GIEMHYCMBGELGY-UHFFFAOYSA-N
Formula:	C11H22O
SMILES:	C=CCCCCCCCCO
Mol. weight [g/mol]:	170.29
CAS:	112-43-6

Physical Properties

Property code	Value	Unit	Source
gf	-7.24	kJ/mol	Joback Method
hf	-297.17	kJ/mol	Joback Method
hfus	27.05	kJ/mol	Joback Method
hvap	56.09	kJ/mol	Joback Method
log10ws	-3.54		Crippen Method
logp	3.286		Crippen Method
mcvol	167.420	ml/mol	McGowan Method
pc	2183.60	kPa	Joback Method
ripol	1664.00		NIST Webbook
tb	539.94	K	Joback Method
tc	700.34	K	Joback Method
tf	272.79	K	Joback Method
vc	0.651	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	409.11	J/molxK	539.94	Joback Method
cpg	471.09	J/molxK	673.61	Joback Method
cpg	459.71	J/molxK	646.87	Joback Method
cpg	447.83	J/molxK	620.14	Joback Method
cpg	435.45	J/molxK	593.41	Joback Method
cpg	422.55	J/molxK	566.67	Joback Method
cpg	482.00	J/molxK	700.34	Joback Method
dvisc	0.0001077	Paxs	539.94	Joback Method
dvisc	0.0001775	Paxs	495.42	Joback Method
dvisc	0.0003228	Paxs	450.89	Joback Method
dvisc	0.0006692	Paxs	406.37	Joback Method
dvisc	0.0016603	Paxs	361.84	Joback Method
dvisc	0.0053154	Paxs	317.31	Joback Method
dvisc	0.0248802	Paxs	272.79	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	405.00	K	2.00	NIST Webbook
tbrp	405.70	K	2.00	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.44069e+01
Coeff. B	-4.42933e+03
Coeff. C	-8.56130e+01
Temperature range (K), min.	399.32
Temperature range (K), max.	572.60

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C112436&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
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	Ideal gas heat capacity
d_{visc}:	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
pv_{ap}:	Vapor pressure
ri_{pol}:	Polar retention indices
tb:	Normal Boiling Point Temperature
tb_{rp}:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/55-528-5/10-Undecen-1-ol.pdf>

Generated by Cheméo on 2024-04-23 19:20:06.792606258 +0000 UTC m=+16189255.713183570.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.