

2-Decanol, methyl ether

Inchi:	InChI=1S/C11H24O/c1-4-5-6-7-8-9-10-11(2)12-3/h11H,4-10H2,1-3H3
InchiKey:	ZFKHNCAJFBNYRZ-UHFFFAOYSA-N
Formula:	C11H24O
SMILES:	CCCCCCCC(C)OC
Mol. weight [g/mol]:	172.31

Physical Properties

Property code	Value	Unit	Source
gf	-65.70	kJ/mol	Joback Method
hf	-407.87	kJ/mol	Joback Method
hfus	21.91	kJ/mol	Joback Method
hvap	42.10	kJ/mol	Joback Method
log10ws	-3.63		Crippen Method
logp	3.772		Crippen Method
mcvol	171.720	ml/mol	McGowan Method
pc	1918.62	kPa	Joback Method
rinpol	1178.50		NIST Webbook
rinpol	1178.50		NIST Webbook
tb	473.06	K	Joback Method
tc	638.11	K	Joback Method
tf	220.96	K	Joback Method
vc	0.663	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	388.13	J/molxK	473.06	Joback Method
cpg	462.78	J/molxK	610.60	Joback Method
cpg	448.94	J/molxK	583.09	Joback Method
cpg	434.56	J/molxK	555.58	Joback Method
cpg	419.64	J/molxK	528.08	Joback Method
cpg	404.16	J/molxK	500.57	Joback Method
cpg	476.09	J/molxK	638.11	Joback Method
dvisc	0.0001808	Paxs	473.06	Joback Method

dvisc	0.0002466	Paxs	431.04	Joback Method
dvisc	0.0003597	Paxs	389.03	Joback Method
dvisc	0.0005748	Paxs	347.01	Joback Method
dvisc	0.0010452	Paxs	304.99	Joback Method
dvisc	0.0023007	Paxs	262.98	Joback Method
dvisc	0.0068365	Paxs	220.96	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=U333839&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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