

Decyl pentyl ether

Inchi:	InChI=1S/C15H32O/c1-3-5-7-8-9-10-11-13-15-16-14-12-6-4-2/h3-15H2,1-2H3
InchiKey:	CYUXNNBUIUGQFS-UHFFFAOYSA-N
Formula:	C15H32O
SMILES:	CCCCCCCCCOCCCC
Mol. weight [g/mol]:	228.41

Physical Properties

Property code	Value	Unit	Source
gf	-29.58	kJ/mol	Joback Method
hf	-485.15	kJ/mol	Joback Method
hfus	35.79	kJ/mol	Joback Method
hvap	51.39	kJ/mol	Joback Method
log10ws	-5.19		Crippen Method
logp	5.334		Crippen Method
mvol	228.080	ml/mol	McGowan Method
pc	1397.50	kPa	Joback Method
rinpol	1572.00		NIST Webbook
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tb	565.02	K	Joback Method
tc	724.37	K	Joback Method
tf	281.04	K	Joback Method
vc	0.893	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	589.19	J/molxK	565.02	Joback Method
cpg	607.53	J/molxK	591.58	Joback Method
cpg	625.19	J/molxK	618.14	Joback Method
cpg	642.19	J/molxK	644.69	Joback Method
cpg	658.53	J/molxK	671.25	Joback Method
cpg	674.23	J/molxK	697.81	Joback Method
cpg	689.31	J/molxK	724.37	Joback Method
dvisc	0.0036349	Paxs	281.04	Joback Method

dvisc	0.0014111	Paxs	328.37	Joback Method
dvisc	0.0006953	Paxs	375.70	Joback Method
dvisc	0.0004014	Paxs	423.03	Joback Method
dvisc	0.0002588	Paxs	470.36	Joback Method
dvisc	0.0001808	Paxs	517.69	Joback Method
dvisc	0.0001341	Paxs	565.02	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U406415&Units=SI
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
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

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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