1-Propanol, 3-(phenylmethoxy)-

Other names:	1-Propanol, 3-(benzyloxy)-
	1,3-Propanediol monobenzyl ether
	3-Benzyloxypropan-1-ol
	3-Benzyloxypropanol
	Trimethylene glycol monobenzyl ether
	3-benzyloxy-1-propanol
Inchi:	InChI=1S/C10H14O2/c11-7-4-8-12-9-10-5-2-1-3-6-10/h1-3,5-6,11H,4,7-9H2
InchiKey:	FUCYABRIJPUVAT-UHFFFAOYSA-N
Formula:	C10H14O2
SMILES:	OCCCOCc1ccccc1
Mol. weight [g/mol]:	166.22
CAS:	4799-68-2

Physical Properties

Property code	Value	Unit	Source
gf	-96.09	kJ/mol	Joback Method
hf	-297.65	kJ/mol	Joback Method
hfus	20.97	kJ/mol	Joback Method
hvap	59.22	kJ/mol	Joback Method
log10ws	-1.96		Crippen Method
logp	1.586		Crippen Method
mcvol	139.740	ml/mol	McGowan Method
pc	3184.73	kPa	Joback Method
tb	569.48	K	Joback Method
tc	760.48	K	Joback Method
tf	311.93	K	Joback Method
vc	0.524	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	335.92	J/mol×K	569.48	Joback Method
cpg	391.10	J/mol×K	728.65	Joback Method
cpg	381.26	J/mol×K	696.81	Joback Method

cpg	370.84	J/mol×K	664.98	Joback Method
cpg	359.82	J/mol×K	633.15	Joback Method
cpg	348.18	J/mol×K	601.31	Joback Method
cpg	400.38	J/mol×K	760.48	Joback Method
dvisc	0.0000799	Pa×s	569.48	Joback Method
dvisc	0.0001250	Pa×s	526.56	Joback Method
dvisc	0.0002118	Pa×s	483.63	Joback Method
dvisc	0.0003977	Pa×s	440.71	Joback Method
dvisc	0.0008552	Pa×s	397.78	Joback Method
dvisc	0.0022134	Pa×s	354.86	Joback Method
dvisc	0.0074425	Pa×s	311.93	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=C4799682&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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume