

Peroxide, dipropyl

Other names:	Propyl peroxide
Inchi:	InChI=1S/C6H14O2/c1-3-5-7-8-6-4-2/h3-6H2,1-2H3
InchiKey:	MFLLRJTHGPGEB-UHFFFAOYSA-N
Formula:	C6H14O2
SMILES:	CCCOOCCC
Mol. weight [g/mol]:	118.17
CAS:	29914-92-9

Physical Properties

Property code	Value	Unit	Source
gf	-310.73	kJ/mol	Joback Method
hf	-484.45	kJ/mol	Joback Method
hfus	15.67	kJ/mol	Joback Method
hvap	36.36	kJ/mol	Joback Method
log10ws	-1.50		Crippen Method
logp	1.755		Crippen Method
mcvol	107.140	ml/mol	McGowan Method
pc	2912.39	kPa	Joback Method
tb	394.90	K	Joback Method
tc	568.48	K	Joback Method
tf	199.71	K	Joback Method
vc	0.398	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	195.57	J/molxK	394.90	Joback Method
cpg	205.70	J/molxK	423.83	Joback Method
cpg	215.49	J/molxK	452.76	Joback Method
cpg	224.95	J/molxK	481.69	Joback Method
cpg	234.06	J/molxK	510.62	Joback Method
cpg	242.83	J/molxK	539.55	Joback Method
cpg	251.26	J/molxK	568.48	Joback Method
dvisc	0.0061209	Paxs	199.71	Joback Method

dvisc	0.0025203	Paxs	232.24	Joback Method
dvisc	0.0012905	Paxs	264.77	Joback Method
dvisc	0.0007651	Paxs	297.30	Joback Method
dvisc	0.0005028	Paxs	329.84	Joback Method
dvisc	0.0003564	Paxs	362.37	Joback Method
dvisc	0.0002673	Paxs	394.90	Joback Method

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=C29914929&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cp_g:	Ideal gas heat capacity
dvisc:	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
log₁₀w_s:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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