4-Methyl-2-propyl-1,3-dioxolane

Other names: 1,3-Dioxolane, 4-methyl-2-propyl, trans
4-methyl-2-propyl-1,3-dioxolane
Inchi: InChI=1S/C7H14O2/c1-3-4-7-8-5-6(2)9-7/h6-7H,3-5H2,1-2H3
InchiKey: WRTYJFJOOTWPJP-UHFFFAOYSA-N
Formula: C7H14O2
SMILES: CCCC1OCC(C)O1
Mol. weight [g/mol]: 130.19

Physical Properties

Property code	Value	Unit	Source
hfus	24.85	kJ/mol	Joback Method
logp	1.548		Crippen Method
mcvol	110.370	ml/mol	McGowan Method
rinpol	874.00		NIST Webbook
rinpol	867.00		NIST Webbook
rinpol	870.00		NIST Webbook
rinpol	879.00		NIST Webbook
rinpol	864.00		NIST Webbook
rinpol	840.10		NIST Webbook
rinpol	876.00		NIST Webbook
rinpol	876.00		NIST Webbook
rinpol	874.00		NIST Webbook
tb	410.57	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	235.21	J/mol×K	424.07	Joback Method
cpg	249.91	J/mol×K	456.51	Joback Method
cpg	263.96	J/mol×K	488.95	Joback Method
cpg	277.36	J/mol×K	521.39	Joback Method
cpg	290.14	J/mol×K	553.84	Joback Method
cpg	302.31	J/mol×K	586.28	Joback Method
cpg	313.87	J/mol×K	618.72	Joback Method

dvisc	0.0036427	Pa×s	228.45	Joback Method
dvisc	0.0020112	Pa×s	261.05	Joback Method
dvisc	0.0012670	Pa×s	293.66	Joback Method
dvisc	0.0008754	Pa×s	326.26	Joback Method
dvisc	0.0006469	Pa×s	358.86	Joback Method
dvisc	0.0005027	Pa×s	391.47	Joback Method
dvisc	0.0004061	Pa×s	424.07	Joback Method

Sources

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C4352992&Units=SI

Joback Method: https://en.wikipedia.org/wiki/Joback_method

McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

Cheméo Relay (1.0):

Legend

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

hfus: Enthalpy of fusion at standard conditions

logp: Octanol/Water partition coefficient

mcvol: McGowan's characteristic volume

rinpol: Non-polar retention indices

tb: Normal Boiling Point Temperature