1,2-Dimethoxy-4-propylbenzene

Other names: Benzene, 1,2-dimethoxy-4-propyl-
Dihydromethyleugenol
1,2-Dimethoxy-4-propylbenzene
Inchi: InChI=1S/C11H16O2/c1-4-5-9-6-7-10(12-2)11(8-9)13-3/h6-8H,4-5H2,1-3H3
InchiKey: YXLFQKUIZVSIEP-UHFFFAOYSA-N
Formula: C11H16O2
SMILES: CCCc1ccc(OC)c(OC)c1
Mol. weight [g/mol]: 180.25

Physical Properties

Property code	Value	Unit	Source
af	0.5770		Cheméo Relay (1.0)
hfus	19.89	kJ/mol	Joback Method
hvap	68.50	kJ/mol	Cheméo Relay (1.0)
ie	7.88	eV	Cheméo Relay (1.0)
log10ws	-3.12		Cheméo Relay (1.0)
logp	2.656		Crippen Method
mcvol	153.830	ml/mol	McGowan Method
pc	2482.59	kPa	Joback Method
tb	521.38	K	Cheméo Relay (1.0)
tc	711.41	K	Cheméo Relay (1.0)
tf	288.61	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	351.48	J/mol×K	532.56	Joback Method
cpg	430.10	J/mol×K	733.53	Joback Method
cpg	418.55	J/mol×K	700.03	Joback Method
cpg	406.38	J/mol×K	666.54	Joback Method
cpg	393.58	J/mol×K	633.04	Joback Method
cpg	380.17	J/mol×K	599.55	Joback Method
cpg	366.13	J/mol×K	566.05	Joback Method
dvisc	0.0003060	Pa×s	421.10	Joback Method

dvisc	0.0001437	Pa×s	532.56	Joback Method
dvisc	0.0001780	Pa×s	495.41	Joback Method
dvisc	0.0002283	Pa×s	458.26	Joback Method
dvisc	0.0011230	Pa×s	309.65	Joback Method
dvisc	0.0004340	Pa×s	383.95	Joback Method
dvisc	0.0006634	Pa×s	346.80	Joback Method

Sources

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C5888528&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

af: Acentric Factor

cpg: Ideal gas heat capacity

dvisc: Dynamic viscosity

hfus: Enthalpy of fusion at standard conditions

hvap: Enthalpy of vaporization at standard conditions

ie: Ionization energy

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