Cyclohexanol, 5-methyl-2-(1-methylethyl)-, benzoate, [1R-(1«alpha»,2«beta»,5«alpha»)]-

Other names: Benzoic acid, (-)-menthyl ester
(-)-menthyl benzoate
Menthyl benzoate

Inchi: InChI=1S/C17H24O2/c1-12(2)15-10-9-13(3)11-16(15)19-17(18)14-7-5-4-6-8-14/h4-8,12-

InchiKey: TTYVYRHNIVBWCB-UHFFFAOYSA-N

Formula: C17H24O2

SMILES: CC1CCC(C(C)C)C(OC(=O)c2ccccc2)C1

Mol. weight [g/mol]: 260.37

CAS: 6284-35-1

Physical Properties

Property code	Value	Unit	Source
gf	-22.66	kJ/mol	Joback Method
hf	-394.12	kJ/mol	Joback Method
hfus	27.07	kJ/mol	Joback Method
hvap	64.29	kJ/mol	Joback Method
log10ws	-4.76		Crippen Method
logp	4.304		Crippen Method
mcvol	223.210	ml/mol	McGowan Method
pc	1848.33	kPa	Joback Method
tb	701.10	K	Joback Method
tc	927.69	K	Joback Method
tf	363.83	K	Joback Method
vc	0.829	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	761.01	J/mol×K	927.69	Joback Method
cpg	654.24	J/mol×K	701.10	Joback Method
cpg	675.79	J/mol×K	738.87	Joback Method
cpg	695.79	J/mol×K	776.63	Joback Method
cpg	714.28	J/mol×K	814.40	Joback Method
cpg	731.29	J/mol×K	852.16	Joback Method

cpg	746.85	J/mol×K	889.93	Joback Method
dvisc	0.0001567	Pa×s	701.10	Joback Method
dvisc	0.0021464	Pa×s	363.83	Joback Method
dvisc	0.0010363	Pa×s	420.04	Joback Method
dvisc	0.0005942	Pa×s	476.25	Joback Method
dvisc	0.0003831	Pa×s	532.47	Joback Method
dvisc	0.0002686	Pa×s	588.68	Joback Method
dvisc	0.0002004	Pa×s	644.89	Joback Method
hvapt	69.90	kJ/mol	485.00	NIST Webbook

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C6284351&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method

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
hvapt: Enthalpy of vaporization at a given temperature
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