P-DECYLOXYBENZALDEHYDE

Other names: 4-n-Decyloxybenzaldehyde
Benzaldehyde, 4-(decyloxy)-
p-Decyloxybenzaldehyde
p-n-Decyloxybenzaldehyde
Inchi: InChI=1S/C17H26O2/c1-2-3-4-5-6-7-8-9-14-19-17-12-10-16(15-18)11-13-17/h10-13,15H
InchiKey: WOSYBKJRUQJISL-UHFFFAOYSA-N
Formula: C17H26O2
SMILES: CCCCCCCCCCOc1ccc(C=O)cc1
Mol. weight [g/mol]: 262.39

Physical Properties

Property code	Value	Unit	Source
af	0.8435		Cheméo Relay (1.0)
hfus	36.91	kJ/mol	Joback Method
hvap	90.11	kJ/mol	Cheméo Relay (1.0)
ie	8.82	eV	Cheméo Relay (1.0)
log10ws	-5.80		Cheméo Relay (1.0)
logp	5.019		Crippen Method
mcvol	234.070	ml/mol	McGowan Method
pc	1629.85	kPa	Joback Method
tb	617.72	K	Cheméo Relay (1.0)
tc	825.78	K	Cheméo Relay (1.0)
tf	316.43	K	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	654.18	J/mol×K	691.10	Joback Method
cpg	743.46	J/mol×K	881.94	Joback Method
cpg	730.71	J/mol×K	850.14	Joback Method
cpg	717.14	J/mol×K	818.33	Joback Method
cpg	702.73	J/mol×K	786.52	Joback Method
cpg	687.45	J/mol×K	754.71	Joback Method
cpg	671.28	J/mol×K	722.91	Joback Method

dvisc	0.0002977	Pa×s	537.81	Joback Method
dvisc	0.0001197	Pa×s	691.10	Joback Method
dvisc	0.0001545	Pa×s	640.00	Joback Method
dvisc	0.0002085	Pa×s	588.91	Joback Method
dvisc	0.0015295	Pa×s	384.52	Joback Method
dvisc	0.0004581	Pa×s	486.71	Joback Method
dvisc	0.0007799	Pa×s	435.62	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C24083167&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

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