2,4-Decadienal, # 2

Inchi: InChI=1S/C10H16O/c1-2-3-4-5-6-7-8-9-10-11/h6-10H,2-5H2,1H3
InchiKey: JZQKTMZYLHNFPL-UHFFFAOYSA-N
Formula: C10H16O
SMILES: CCCCCC=CC=CC=O
Mol. weight [g/mol]: 152.23

Physical Properties

Property code	Value	Unit	Source
gf	94.24	kJ/mol	Joback Method
hf	-100.87	kJ/mol	Joback Method
hfus	24.35	kJ/mol	Joback Method
hvap	44.49	kJ/mol	Joback Method
log10ws	-3.00		Crippen Method
logp	2.878		Crippen Method
mcvol	144.730	ml/mol	McGowan Method
pc	2500.00	kPa	Joback Method
rinpol	1319.00		NIST Webbook
rinpol	1319.00		NIST Webbook
tb	485.18	K	Joback Method
tc	669.38	K	Joback Method
tf	234.30	K	Joback Method
vc	0.573	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	309.28	J/mol×K	485.18	Joback Method
cpg	369.81	J/mol×K	638.68	Joback Method
cpg	358.96	J/mol×K	607.98	Joback Method
cpg	347.52	J/mol×K	577.28	Joback Method
cpg	335.45	J/mol×K	546.58	Joback Method
cpg	322.72	J/mol×K	515.88	Joback Method
cpg	380.10	J/mol×K	669.38	Joback Method
dvisc	0.0002049	Pa×s	485.18	Joback Method

dvisc	0.0002689	Pa×s	443.37	Joback Method
dvisc	0.0003733	Pa×s	401.55	Joback Method
dvisc	0.0005593	Pa×s	359.74	Joback Method
dvisc	0.0009322	Pa×s	317.93	Joback Method
dvisc	0.0018135	Pa×s	276.11	Joback Method
dvisc	0.0044740	Pa×s	234.30	Joback Method

Sources

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=R559578&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

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
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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