2,4-Undecadienal, (E,E)-

Other names:	2,4-trans,trans-Undecadienal
	2,4-Undecadien-1-al
	trans,trans-2,4-Undecadien-1-al
	(E,E)-2,4-Undecadien-1-al
	(2E,4E)-2,4-Undecadienal
	(E,E)-2,4-Undecadienal
	(E,E)-Undeca-2,4-dienal
	(E,E)-2,4-Undecanal
	(2E,4E)-undeca-2,4-dienal
Inchi:	InChI=1S/C11H18O/c1-2-3-4-5-6-7-8-9-10-11-12/h7-11H,2-6H2,1H3/b8-7+,10-9+
InchiKey:	UVIUIIFPIWRILL-XBLVEGMJSA-N
Formula:	C11H18O
SMILES:	CCCCCCC=CC=CC=O
Mol. weight [g/mol]:	166.26
CAS:	30361-29-6

Physical Properties

Property code	Value	Unit	Source
gf	102.66	kJ/mol	Joback Method
hf	-121.51	kJ/mol	Joback Method
hfus	26.94	kJ/mol	Joback Method
hvap	46.72	kJ/mol	Joback Method
log10ws	-3.41		Crippen Method
logp	3.268		Crippen Method
mcvol	158.820	ml/mol	McGowan Method
pc	2276.24	kPa	Joback Method
rinpol	1445.00		NIST Webbook
rinpol	1416.00		NIST Webbook
rinpol	1430.00		NIST Webbook
rinpol	1445.00		NIST Webbook
ripol	1958.00		NIST Webbook
ripol	1958.00		NIST Webbook
ripol	1931.00		NIST Webbook
tb	508.06	K	Joback Method
tc	690.37	K	Joback Method
tf	245.57	K	Joback Method
vc	0.628	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	354.24	J/mol×K	508.06	Joback Method
cpg	368.47	J/mol×K	538.45	Joback Method
cpg	381.98	J/mol×K	568.83	Joback Method
cpg	394.80	J/mol×K	599.22	Joback Method
cpg	406.97	J/mol×K	629.60	Joback Method
cpg	418.52	J/mol×K	659.99	Joback Method
cpg	429.49	J/mol×K	690.37	Joback Method
dvisc	0.0044691	Pa×s	245.57	Joback Method
dvisc	0.0017841	Pa×s	289.32	Joback Method
dvisc	0.0009065	Pa×s	333.07	Joback Method
dvisc	0.0005390	Pa×s	376.81	Joback Method
dvisc	0.0003571	Pa×s	420.56	Joback Method
dvisc	0.0002557	Pa×s	464.31	Joback Method
dvisc	0.0001939	Pa×s	508.06	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C30361296&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume