

Tridecane-2,4-dione

Other names:	2,4-Tridecanedione 2,4-Tridecadione
Inchi:	InChI=1S/C13H24O2/c1-3-4-5-6-7-8-9-10-13(15)11-12(2)14/h3-11H2,1-2H3
InchiKey:	QAXKYAIESKANJL-UHFFFAOYSA-N
Formula:	C13H24O2
SMILES:	CCCCCCCCC(=O)CC(C)=O
Mol. weight [g/mol]:	212.33
CAS:	25276-80-6

Physical Properties

Property code	Value	Unit	Source
gf	-199.26	kJ/mol	Joback Method
hf	-536.81	kJ/mol	Joback Method
hfus	32.62	kJ/mol	Joback Method
hvap	58.02	kJ/mol	Joback Method
log10ws	-3.82		Crippen Method
logp	3.675		Crippen Method
mvol	197.170	ml/mol	McGowan Method
pc	1826.28	kPa	Joback Method
rinpol	1560.00		NIST Webbook
tb	604.58	K	Joback Method
tc	781.66	K	Joback Method
tf	336.13	K	Joback Method
vc	0.775	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	512.50	J/molxK	604.58	Joback Method
cpg	528.06	J/molxK	634.09	Joback Method
cpg	542.90	J/molxK	663.61	Joback Method
cpg	557.05	J/molxK	693.12	Joback Method
cpg	570.54	J/molxK	722.63	Joback Method
cpg	583.37	J/molxK	752.14	Joback Method

cpg	595.56	J/mol×K	781.66	Joback Method
dvisc	0.0032060	Paxs	336.13	Joback Method
dvisc	0.0015788	Paxs	380.87	Joback Method
dvisc	0.0009023	Paxs	425.61	Joback Method
dvisc	0.0005736	Paxs	470.35	Joback Method
dvisc	0.0003945	Paxs	515.10	Joback Method
dvisc	0.0002881	Paxs	559.84	Joback Method
dvisc	0.0002204	Paxs	604.58	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C25276806&Units=SI

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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