

Ubidecarenone

Other names:	(all-E)-2-(3,7,11,15,19,23,27,31,35,39-Decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, 2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, (all-trans)-2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, 2-(all-E)-3,7,11,15,19,23,27,31,35,39-Decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, 2-(3,7,11,15,19,23,27,31,35,39-Decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, (all,trans)-2-(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,-35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione, (Ubidecarenone) Coenzyme Q10 Emitolon Heartcin Inokiten Justquinon NSC 140865 Neuquinon Neuquinone Q 10AA Q 199 Terekol Ube-Q Ubiquinone 50 Ubiquinone Q10 Udekinon p-Benzoquinone, 2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecatriene-2,5-Cyclohexadiene-1,4-dione ubiquinone ubiquinone 10
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hfus	82.00	kJ/mol	Binary solid liquid gas equilibrium of the tripalmitin/CO2 and ubiquinone/CO2 systems
hvap	164.59	kJ/mol	Joback Method
log10ws	-20.38		Crippen Method
logp	17.854		Crippen Method
mcvol	794.590	ml/mol	McGowan Method
pc	275.39	kPa	Joback Method
tb	1812.66	K	Joback Method
tc	3030.41	K	Joback Method
tf	808.41	K	Joback Method
vc	3.106	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	3540.42	J/mol×K	1812.66	Joback Method
cpg	3886.64	J/mol×K	2015.62	Joback Method
cpg	4366.40	J/mol×K	2218.58	Joback Method
cpg	5019.52	J/mol×K	2421.54	Joback Method
cpg	5885.84	J/mol×K	2624.49	Joback Method
cpg	7005.18	J/mol×K	2827.45	Joback Method
cpg	8417.35	J/mol×K	3030.41	Joback Method
hfust	82.00	kJ/mol	322.50	NIST Webbook

Sources

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C303980&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Binary solid liquid gas equilibrium of the tripalmitin/CO2 and ubiquinone/CO2 systems:

<https://www.doi.org/10.1016/j.fluid.2005.12.017>

McGowan Method:

https://en.wikipedia.org/wiki/Joback_method
<http://link.springer.com/article/10.1007/BF02311772>

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hfust:	Enthalpy of fusion at a given temperature
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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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