

2H-Pyran-2-one, 5,6-dihydro-3,5,5-trimethyl-

Inchi:	InChI=1S/C8H12O2/c1-6-4-8(2,3)5-10-7(6)9/h4H,5H2,1-3H3
InchiKey:	QQKORHIXEIIINLR-UHFFFAOYSA-N
Formula:	C8H12O2
SMILES:	CC1=CC(C)(C)COC1=O
Mol. weight [g/mol]:	140.18
CAS:	74793-10-5

Physical Properties

Property code	Value	Unit	Source
gf	-152.94	kJ/mol	Joback Method
hf	-362.28	kJ/mol	Joback Method
hfus	10.33	kJ/mol	Joback Method
hvap	42.39	kJ/mol	Joback Method
log10ws	-1.54		Crippen Method
logp	1.516		Crippen Method
mcvol	115.860	ml/mol	McGowan Method
pc	3505.43	kPa	Joback Method
tb	501.14	K	Joback Method
tc	733.34	K	Joback Method
tf	298.60 ± 0.80	K	NIST Webbook
vc	0.428	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	261.14	J/mol×K	501.14	Joback Method
cpg	275.78	J/mol×K	539.84	Joback Method
cpg	289.56	J/mol×K	578.54	Joback Method
cpg	302.58	J/mol×K	617.24	Joback Method
cpg	314.93	J/mol×K	655.94	Joback Method
cpg	326.69	J/mol×K	694.64	Joback Method
cpg	337.94	J/mol×K	733.34	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C74793105&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

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
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mccvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/61-719-6/2H-Pyran-2-one-5-6-dihydro-3-5-5-trimethyl.pdf>

Generated by Cheméo on 2024-04-20 02:45:19.451877848 +0000 UTC m=+15870368.372455161.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.