9H-Fluorene, 9-(1-methylethyl)-

Other names:	9-(1-Methylethyl)-9H-fluorene
	9-Isopropylfluorene
	Fluorene, 9-isopropyl-
	9-Isopropyl-9H-fluorene
Inchi:	InChI=1S/C16H16/c1-11(2)16-14-9-5-3-7-12(14)13-8-4-6-10-15(13)16/h3-11,16H,1-2H3
InchiKey:	HOJPTYYFGWUDJX-UHFFFAOYSA-N
Formula:	C16H16
SMILES:	CC(C)C1c2ccccc2-c2ccccc21
Mol. weight [g/mol]:	208.30
CAS:	3299-99-8

Physical Properties

Property code	Value	Unit	Source
gf	371.91	kJ/mol	Joback Method
hf	156.39	kJ/mol	Joback Method
hfus	23.31	kJ/mol	Joback Method
hvap	56.27	kJ/mol	Joback Method
log10ws	-5.40		Crippen Method
logp	4.455		Crippen Method
mcvol	177.920	ml/mol	McGowan Method
pc	2417.12	kPa	Joback Method
rinpol	276.40		NIST Webbook
rinpol	274.00		NIST Webbook
tb	626.56	K	Joback Method
tc	864.15	K	Joback Method
tf	357.94	K	Joback Method
vc	0.682	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	454.11	J/mol×K	626.56	Joback Method
cpg	471.43	J/mol×K	666.16	Joback Method
cpg	487.46	J/mol×K	705.76	Joback Method

cpg	502.32	J/mol×K	745.36	Joback Method
cpg	516.13	J/mol×K	784.95	Joback Method
cpg	529.03	J/mol×K	824.55	Joback Method
cpg	541.13	J/mol×K	864.15	Joback Method
dvisc	0.0016916	Pa×s	357.94	Joback Method
dvisc	0.0012884	Pa×s	402.71	Joback Method
dvisc	0.0010363	Pa×s	447.48	Joback Method
dvisc	0.0008672	Pa×s	492.25	Joback Method
dvisc	0.0007475	Pa×s	537.02	Joback Method
dvisc	0.0006593	Pa×s	581.79	Joback Method
dvisc	0.0005920	Pa×s	626.56	Joback Method

Sources

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
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3299998&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