As-Indacene, dodecahydro-4-(1-octylnonyl)-

Other names:	5-(1'-n-Octylnonyl)-(dodecahydro(as)indacene)
	9-(4-as-Perhydroindacenyl)heptadecane
	9-(4'-as-Decahydroindacenyl)heptadecane
Inchi:	InChI=1S/C29H54/c1-3-5-7-9-11-13-17-24(18-14-12-10-8-6-4-2)29-23-25-19-15-20-26(25
InchiKey:	JSKCOAYGYKRYTA-UHFFFAOYSA-N
Formula:	C29H54
SMILES:	CCCCCCCCC(CCCCCCCC)C1CC2CCCC2C2CCCC12
Mol. weight [g/mol]:	402.74
CAS:	55530-51-3

Physical Properties

Property code	Value	Unit	Source
gf	321.39	kJ/mol	Joback Method
hf	-487.93	kJ/mol	Joback Method
hfus	57.59	kJ/mol	Joback Method
hvap	79.40	kJ/mol	Joback Method
log10ws	-10.20		Crippen Method
logp	9.956		Crippen Method
mcvol	386.890	ml/mol	McGowan Method
pc	773.75	kPa	Joback Method
tb	886.17	K	Joback Method
tc	1087.30	K	Joback Method
tf	436.37	K	Joback Method
vc	1.498	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1391.85	J/mol×K	886.17	Joback Method
cpg	1417.64	J/mol×K	919.69	Joback Method
cpg	1442.01	J/mol×K	953.21	Joback Method
cpg	1465.08	J/mol×K	986.74	Joback Method
cpg	1486.96	J/mol×K	1020.26	Joback Method
cpg	1507.75	J/mol×K	1053.78	Joback Method

cpg	1527.57	J/mol×K	1087.30	Joback Method
dvisc	0.0032450	Pa×s	436.37	Joback Method
dvisc	0.0018478	Pa×s	511.34	Joback Method
dvisc	0.0012151	Pa×s	586.30	Joback Method
dvisc	0.0008788	Pa×s	661.27	Joback Method
dvisc	0.0006789	Pa×s	736.24	Joback Method
dvisc	0.0005501	Pa×s	811.20	Joback Method
dvisc	0.0004618	Pa×s	886.17	Joback Method

Sources

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=C55530513&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

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