1-Vinyl-3«alpha»-methylstyrene

Other names: 3-vinyl-«alpha»-methylstyrene
Inchi: InChI=1S/C11H12/c1-4-10-6-5-7-11(8-10)9(2)3/h4-8H,1-2H2,3H3
InchiKey: KMEOLTFYHMJSHJ-UHFFFAOYSA-N
Formula: C11H12
SMILES: C=Cc1cccc(C(=C)C)c1
Mol. weight [g/mol]: 144.21

Physical Properties

Property code	Value	Unit	Source
gf	311.65	kJ/mol	Joback Method
hf	195.76	kJ/mol	Joback Method
hfus	14.03	kJ/mol	Joback Method
hvap	41.76	kJ/mol	Joback Method
log10ws	-3.54		Crippen Method
logp	3.363		Crippen Method
mcvol	133.490	ml/mol	McGowan Method
pc	2862.74	kPa	Joback Method
rinpol	1195.80		NIST Webbook
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tb	475.98	K	Joback Method
tc	692.49	K	Joback Method
tf	235.19	K	Joback Method
vc	0.506	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	265.83	J/mol×K	475.98	Joback Method
cpg	280.46	J/mol×K	512.06	Joback Method
cpg	294.18	J/mol×K	548.15	Joback Method
cpg	307.06	J/mol×K	584.23	Joback Method
cpg	319.12	J/mol×K	620.32	Joback Method
cpg	330.41	J/mol×K	656.40	Joback Method
cpg	340.98	J/mol×K	692.49	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=R11399&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

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
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