

Propyl tert-butyl disulfide

Inchi:	InChI=1S/C7H16S2/c1-5-6-8-9-7(2,3)4/h5-6H2,1-4H3
InchiKey:	UCBQXDKQZUDUBM-UHFFFAOYSA-N
Formula:	C7H16S2
SMILES:	CCCSSC(C)(C)C
Mol. weight [g/mol]:	164.33

Physical Properties

Property code	Value	Unit	Source
gf	77.14	kJ/mol	Joback Method
hf	-112.82	kJ/mol	Joback Method
hfus	14.73	kJ/mol	Joback Method
hvap	43.51	kJ/mol	Joback Method
log10ws	-3.62		Crippen Method
logp	3.576		Crippen Method
mcvol	142.190	ml/mol	McGowan Method
pc	2963.34	kPa	Joback Method
rinpole	1112.00		NIST Webbook
ripole	1371.00		NIST Webbook
ripole	1371.00		NIST Webbook
tb	493.89	K	Joback Method
tc	717.04	K	Joback Method
tf	239.87	K	Joback Method
vc	0.524	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	299.52	J/molxK	493.89	Joback Method
cpg	314.16	J/molxK	531.08	Joback Method
cpg	327.96	J/molxK	568.27	Joback Method
cpg	340.94	J/molxK	605.47	Joback Method
cpg	353.13	J/molxK	642.66	Joback Method
cpg	364.54	J/molxK	679.85	Joback Method
cpg	375.22	J/molxK	717.04	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R602469&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
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

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
rinpolar:	Non-polar retention indices
ripolar:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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