Disulfide, 1-methylethyl propyl

Other names:	Disulfide, isopropyl propyl
	Isopropyl propyl disulfide
	1-(Isopropyldisulfanyl)propane
	2-Methyl-3,4-dithiaheptane
	Propyl isopropyl disulfide
	isopropyl propyl disulphide
Inchi:	InChI=1S/C6H14S2/c1-4-5-7-8-6(2)3/h6H,4-5H2,1-3H3
InchiKey:	YCBVTHJPQCNICU-UHFFFAOYSA-N
Formula:	C6H14S2
SMILES:	CCCSSC(C)C
Mol. weight [g/mol]:	150.31
CAS:	33672-51-4

Physical Properties

Property code	Value	Unit	Source
gf	63.44	kJ/mol	Joback Method
hf	-88.71	kJ/mol	Joback Method
hfus	16.03	kJ/mol	Joback Method
hvap	42.20	kJ/mol	Joback Method
log10ws	-3.20		Crippen Method
logp	3.186		Crippen Method
mcvol	128.100	ml/mol	McGowan Method
pc	3257.86	kPa	Joback Method
rinpol	1071.00		NIST Webbook
rinpol	1071.00		NIST Webbook
rinpol	1071.00		NIST Webbook
ripol	1358.00		NIST Webbook
ripol	1358.00		NIST Webbook
tb	457.00 ± 1.70	K	NIST Webbook
tc	691.06	K	Joback Method
tf	211.18	K	Joback Method
vc	0.473	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	254.21	J/mol×K	473.80	Joback Method
cpg	266.88	J/mol×K	510.01	Joback Method
cpg	278.98	J/mol×K	546.22	Joback Method
cpg	290.51	J/mol×K	582.43	Joback Method
cpg	301.47	J/mol×K	618.64	Joback Method
cpg	311.87	J/mol×K	654.85	Joback Method
cpg	321.69	J/mol×K	691.06	Joback Method
hvapt	45.40	kJ/mol	408.00	NIST Webbook

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=C33672514&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
hvapt:	Enthalpy of vaporization at a given temperature
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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature

tf:	Normal melting (fusion) point
vc:	Critical Volume

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