dipropyl tetrasulfide

Other names:	Tetrasulfide, dipropyl
	Di-n-propyl tetrasulfide
	Dipropyl tetrasulphide
Inchi:	InChI=1S/C6H14S4/c1-3-5-7-9-10-8-6-4-2/h3-6H2,1-2H3
InchiKey:	GJKGKILUTIBVOI-UHFFFAOYSA-N
Formula:	C6H14S4
SMILES:	CCCSSSSCCC
Mol. weight [g/mol]:	214.44
CAS:	52687-98-6

Physical Properties

Property code	Value	Unit	Source
gf	132.12	kJ/mol	Joback Method
hf	0.31	kJ/mol	Joback Method
hfus	27.82	kJ/mol	Joback Method
hvap	56.22	kJ/mol	Joback Method
log10ws	-4.84		Crippen Method
logp	4.484		Crippen Method
mcvol	160.800	ml/mol	McGowan Method
pc	3356.75	kPa	Joback Method
rinpol	1558.00		NIST Webbook
rinpol	1544.00		NIST Webbook
rinpol	1520.40		NIST Webbook
rinpol	1536.00		NIST Webbook
rinpol	1558.00		NIST Webbook
rinpol	1526.00		NIST Webbook
rinpol	1573.00		NIST Webbook
rinpol	1533.00		NIST Webbook
rinpol	1533.00		NIST Webbook
rinpol	1558.00		NIST Webbook
rinpol	1569.00		NIST Webbook
rinpol	1569.00		NIST Webbook
rinpol	1570.00		NIST Webbook
tb	611.80	K	Joback Method
tc	865.13	K	Joback Method
tf	294.98	K	Joback Method
vc	0.588	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	348.61	J/mol×K	611.80	Joback Method
cpg	361.76	J/mol×K	654.02	Joback Method
cpg	374.06	J/mol×K	696.24	Joback Method
cpg	385.48	J/mol×K	738.46	Joback Method
cpg	396.00	J/mol×K	780.68	Joback Method
cpg	405.59	J/mol×K	822.91	Joback Method
cpg	414.23	J/mol×K	865.13	Joback Method

Sources

McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C52687986&Units=SI
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

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