

Tetrasulfide, di-2-propenyl

Other names:	Diallyl tetrasulphide Diallyl tetrasulfide
Inchi:	InChI=1S/C6H10S4/c1-3-5-7-9-10-8-6-4-2/h3-4H,1-2,5-6H2
InchiKey:	RMKCQUWJDRTEHE-UHFFFAOYSA-N
Formula:	C6H10S4
SMILES:	C=CCSSSSCC=C
Mol. weight [g/mol]:	210.40
CAS:	2444-49-7

Physical Properties

Property code	Value	Unit	Source
gf	307.80	kJ/mol	Joback Method
hf	251.17	kJ/mol	Joback Method
hfus	25.26	kJ/mol	Joback Method
hvap	54.88	kJ/mol	Joback Method
log10ws	-4.55		Crippen Method
logp	4.036		Crippen Method
mcvol	152.200	ml/mol	McGowan Method
pc	3708.97	kPa	Joback Method
rinpol	1538.00		NIST Webbook
rinpol	1482.00		NIST Webbook
rinpol	1525.00		NIST Webbook
rinpol	1540.00		NIST Webbook
rinpol	1510.00		NIST Webbook
rinpol	1472.00		NIST Webbook
rinpol	1555.00		NIST Webbook
rinpol	1458.00		NIST Webbook
rinpol	1502.00		NIST Webbook
rinpol	1510.00		NIST Webbook
rinpol	1482.00		NIST Webbook
rinpol	1472.00		NIST Webbook
rinpol	1502.00		NIST Webbook
tb	605.16	K	Joback Method
tc	870.47	K	Joback Method
tf	291.46	K	Joback Method
vc	0.549	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	307.19	J/mol×K	605.16	Joback Method
cpg	318.59	J/mol×K	649.38	Joback Method
cpg	329.14	J/mol×K	693.60	Joback Method
cpg	338.83	J/mol×K	737.81	Joback Method
cpg	347.65	J/mol×K	782.03	Joback Method
cpg	355.60	J/mol×K	826.25	Joback Method
cpg	362.67	J/mol×K	870.47	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=C2444497&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

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

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