

# Disulfide, methyl 1-propenyl, trans

<b>Other names:</b>	(E)-1-propenyl methyl disulfide (E)-propenyl methyl disulfide trans-1-propenyl methyl disulfide methyl (E)-propenyl disulfide (E)-propenyl methyl disulphide Disulfide, methyl 1-propenyl, E Methyl 1-propenyl disulphide, trans
<b>Inchi:</b>	InChI=1S/C4H8S2/c1-3-4-6-5-2/h3-4H,1-2H3/b4-3+
<b>InchiKey:</b>	FUDUFCLRGSEHAJ-ONEGZZNKSA-N
<b>Formula:</b>	C4H8S2
<b>SMILES:</b>	CC=CSSC
<b>Mol. weight [g/mol]:</b>	120.24

## Physical Properties

Property code	Value	Unit	Source
gf	129.26	kJ/mol	Joback Method
hf	75.07	kJ/mol	Joback Method
hfus	14.58	kJ/mol	Joback Method
hvap	38.09	kJ/mol	Joback Method
log10ws	-2.60		Crippen Method
logp	2.531		Crippen Method
mcvol	95.620	ml/mol	McGowan Method
pc	4351.13	kPa	Joback Method
rinpol	915.50		NIST Webbook
rinpol	946.00		NIST Webbook
rinpol	922.00		NIST Webbook
rinpol	919.00		NIST Webbook
rinpol	922.00		NIST Webbook
rinpol	918.00		NIST Webbook
rinpol	915.50		NIST Webbook
ripol	1287.00		NIST Webbook
ripol	1297.00		NIST Webbook
ripol	1297.00		NIST Webbook
ripol	1270.00		NIST Webbook
ripol	1270.00		NIST Webbook
ripol	1289.00		NIST Webbook
ripol	1290.00		NIST Webbook

ripol	1285.00		NIST Webbook
ripol	1292.00		NIST Webbook
tb	432.64	K	Joback Method
tc	662.52	K	Joback Method
tf	198.56	K	Joback Method
vc	0.347	m <sup>3</sup> /kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	159.54	J/mol×K	432.64	Joback Method
cpg	168.42	J/mol×K	470.95	Joback Method
cpg	176.85	J/mol×K	509.27	Joback Method
cpg	184.83	J/mol×K	547.58	Joback Method
cpg	192.36	J/mol×K	585.89	Joback Method
cpg	199.47	J/mol×K	624.20	Joback Method
cpg	206.15	J/mol×K	662.52	Joback Method

## Sources

<b>Joback Method:</b>	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>
<b>McGowan Method:</b>	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
<b>NIST Webbook:</b>	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=R220770&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=R220770&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a>
<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient

<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>rinpol:</b>	Non-polar retention indices
<b>ripol:</b>	Polar retention indices
<b>tb:</b>	Normal Boiling Point Temperature
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

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