

# 4H-1,2,3-Trithiine

<b>Inchi:</b>	InChI=1S/C3H4S3/c1-2-4-6-5-3-1/h1-2H,3H2
<b>InchiKey:</b>	YIHDDWFPRQQFCP-UHFFFAOYSA-N
<b>Formula:</b>	C3H4S3
<b>SMILES:</b>	C1=CSSSC1
<b>Mol. weight [g/mol]:</b>	136.26
<b>CAS:</b>	290-30-2

## Physical Properties

Property code	Value	Unit	Source
gf	156.08	kJ/mol	Joback Method
hf	162.97	kJ/mol	Joback Method
hfus	6.48	kJ/mol	Joback Method
hvap	40.74	kJ/mol	Joback Method
log10ws	-2.95		Crippen Method
logp	2.543		Crippen Method
mcvol	87.020	ml/mol	McGowan Method
pc	6400.00	kPa	Joback Method
rinpol	1201.50		NIST Webbook
rinpol	1201.50		NIST Webbook
ripol	1841.00		NIST Webbook
ripol	1841.00		NIST Webbook
tb	434.91	K	Joback Method
tc	708.38	K	Joback Method
tf	386.30	K	Joback Method
vc	0.262	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	133.81	J/molxK	434.91	Joback Method
cpg	142.51	J/molxK	480.49	Joback Method
cpg	150.44	J/molxK	526.07	Joback Method
cpg	157.65	J/molxK	571.65	Joback Method
cpg	164.20	J/molxK	617.23	Joback Method

cpg	170.14	J/mol×K	662.81	Joback Method
cpg	175.52	J/mol×K	708.38	Joback Method

## Sources

<b>Crippen Method:</b>	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
<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=C290302&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C290302&amp;Units=SI</a>
<b>Crippen Method:</b>	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</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>rinpola:</b>	Non-polar retention indices
<b>ripola:</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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