Trisulfide, dipropyl

Other names:	Propyl trisulfide
	Dipropyl trisulfide
	Di-n-propyl trisulfide
	Dipropyl trisulphide
Inchi:	InChI=1S/C6H14S3/c1-3-5-7-9-8-6-4-2/h3-6H2,1-2H3
InchiKey:	GAZXPZNJTZIGBO-UHFFFAOYSA-N
Formula:	C6H14S3
SMILES:	CCCSSSCCC
Mol. weight [g/mol]:	182.37
CAS:	6028-61-1

Physical Properties

Property code	Value	Unit	Source
gf	99.00	kJ/mol	Joback Method
hf	-41.56	kJ/mol	Joback Method
hfus	23.69	kJ/mol	Joback Method
hvap	49.40	kJ/mol	Joback Method
log10ws	-3.97		Crippen Method
logp	3.836		Crippen Method
mcvol	144.450	ml/mol	McGowan Method
pc	3291.59	kPa	Joback Method
rinpol	1327.00		NIST Webbook
rinpol	1337.30		NIST Webbook
rinpol	228.30		NIST Webbook
rinpol	1302.00		NIST Webbook
rinpol	1309.00		NIST Webbook
rinpol	1313.00		NIST Webbook
rinpol	1294.00		NIST Webbook
rinpol	1292.90		NIST Webbook
rinpol	1314.00		NIST Webbook
rinpol	1313.00		NIST Webbook
rinpol	228.30		NIST Webbook
rinpol	1314.00		NIST Webbook
rinpol	1337.30		NIST Webbook
rinpol	1312.00		NIST Webbook
rinpol	1328.00		NIST Webbook
rinpol	1302.00		NIST Webbook

ripol	1683.00		NIST Webbook
ripol	1683.00		NIST Webbook
ripol	1721.00		NIST Webbook
ripol	1672.00		NIST Webbook
ripol	1662.00		NIST Webbook
ripol	1721.00		NIST Webbook
ripol	1713.00		NIST Webbook
ripol	1738.00		NIST Webbook
tb	543.02	K	Joback Method
tc	776.68	K	Joback Method
tf	260.58	K	Joback Method
vc	0.533	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	301.42	J/mol×K	543.02	Joback Method
cpg	314.30	J/mol×K	581.96	Joback Method
cpg	326.51	J/mol×K	620.91	Joback Method
cpg	338.04	J/mol×K	659.85	Joback Method
cpg	348.88	J/mol×K	698.79	Joback Method
cpg	359.03	J/mol×K	737.73	Joback Method
cpg	368.48	J/mol×K	776.68	Joback Method

Sources

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=C6028611&Units=SI
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

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
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume