

3-(Methylthio)benzoic acid, 2-propylpentyl ester

Inchi:	InChI=1S/C16H24O2S/c1-4-7-13(8-5-2)12-18-16(17)14-9-6-10-15(11-14)19-3/h6,9-11,13
InchiKey:	FUFKGVXPYICPTF-UHFFFAOYSA-N
Formula:	C16H24O2S
SMILES:	CCCC(CCC)COC(=O)c1cccc(SC)c1
Mol. weight [g/mol]:	280.43

Physical Properties

Property code	Value	Unit	Source
gf	-16.62	kJ/mol	Joback Method
hf	-356.72	kJ/mol	Joback Method
hfus	34.24	kJ/mol	Joback Method
hvap	69.73	kJ/mol	Joback Method
log10ws	-5.15		Crippen Method
logp	4.782		Crippen Method
mcvol	236.330	ml/mol	McGowan Method
pc	1784.86	kPa	Joback Method
rinsol	2123.00		NIST Webbook
tb	741.77	K	Joback Method
tc	955.49	K	Joback Method
tf	400.58	K	Joback Method
vc	0.895	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	661.26	J/mol×K	741.77	Joback Method
cpg	677.93	J/mol×K	777.39	Joback Method
cpg	693.50	J/mol×K	813.01	Joback Method
cpg	707.97	J/mol×K	848.63	Joback Method
cpg	721.38	J/mol×K	884.25	Joback Method
cpg	733.74	J/mol×K	919.87	Joback Method
cpg	745.09	J/mol×K	955.49	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U375059&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307I
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
rinpola:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/35-957-1/3-Methylthio-benzoic-acid-2-propylpentyl-ester.pdf>

Generated by Cheméo on 2024-04-20 05:24:21.532694798 +0000 UTC m=+15879910.453272111.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.