

# M-xylene, alpha,alpha,alpha,alpha',alpha',alpha',5-heptafluoro

**Inchi:** InChI=1S/C8H3F7/c9-6-2-4(7(10,11)12)1-5(3-6)8(13,14)15/h1-3H

**InchiKey:** ZBVDOILFQLAMEJ-UHFFFAOYSA-N

**Formula:** C8H3F7

**SMILES:** Fc1cc(C(F)(F)F)cc(C(F)(F)F)c1

**Mol. weight [g/mol]:** 232.10

**CAS:** 35564-19-3

## Physical Properties

Property code	Value	Unit	Source
gf	-1248.36	kJ/mol	Joback Method
hf	-1385.13	kJ/mol	Joback Method
hfus	16.47	kJ/mol	Joback Method
hvap	28.69	kJ/mol	Joback Method
log10ws	-4.01		Crippen Method
logp	3.863		Crippen Method
mcvol	112.210	ml/mol	McGowan Method
pc	2597.78	kPa	Joback Method
tb	407.51	K	Joback Method
tc	572.43	K	Joback Method
tf	240.35	K	Joback Method
vc	0.479	m3/kmol	Joback Method

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	239.87	J/molxK	407.51	Joback Method
cpg	250.40	J/molxK	435.00	Joback Method
cpg	260.25	J/molxK	462.48	Joback Method
cpg	269.46	J/molxK	489.97	Joback Method
cpg	278.04	J/molxK	517.46	Joback Method
cpg	286.03	J/molxK	544.94	Joback Method
cpg	293.47	J/molxK	572.43	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=C35564193&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C35564193&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>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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