

Boron trifluoride etherate

Other names:	Borane, trifluoro-, compd. with 1,1'-oxybis(ethane) (1:1)
	Boron fluoride diethyl ether complex
	Boron fluoride diethyl etherate
	Boron fluoride etherate
	Boron fluoride monoetherate
	Boron fluoride-ethyl ether complex
	Boron fluoride-ethyl etherate
	Boron trifluoride diethyl ether complex
	Boron trifluoride diethyl etherate
	Boron trifluoride diethyl etherate complex
	Boron trifluoride ethyl etherate
	Boron trifluoride ethyl etherate (1:1)
	Boron trifluoride-ether complex
	Boron trifluoride-ethyl ether
	Boron trifluoride-ethyl ether complex
	Boron, trifluoro[1,1'-oxybis[ethane]]-, (T-4)-
	Diethyl ether trifluoroborane complex
	Ethyl ether, cmpd with boron fluoride (BF3) (1:1)
	Ethyl ether, compd. with boron fluoride (BF3) (1:1)
	Trifluoroborane diethyl etherate
	Trifluoroborane-1,1'-oxybis(ethane) (1:1)
	Trifluoroboron etherate
	UN 2604
	diethyl ether--boron trifluoride
Inchi:	InChI=1S/C4H10BF3O/c1-3-9(4-2)5(6,7)8/h3-4H2,1-2H3
InchiKey:	MZTVMRUDEFSYGQ-UHFFFAOYSA-N
Formula:	C4H10BF3O
SMILES:	CC[O+](CC)[B-](F)(F)F
Mol. weight [g/mol]:	141.93
CAS:	109-63-7

Physical Properties

Property code	Value	Unit	Source
log10ws	0.50		Crippen Method
logp	1.923		Crippen Method
tb	399.50 ± 0.50	K	NIST Webbook

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	2.12473e+01
Coeff. B	-6.62914e+03
Temperature range (K), min.	316.28
Temperature range (K), max.	415.99

Sources

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C109637&Units=SI>

The Yaws Handbook of Vapor Pressure: <https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

Legend

log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
pvap: Vapor pressure
tb: Normal Boiling Point Temperature

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<https://www.chemeo.com/cid/34-419-9/Boron-trifluoride-etherate.pdf>

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