

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, compd 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:	MZTVMRUDEFSGQ-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:

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:
Crippen Method:

<https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure>

<http://pubs.acs.org/doi/abs/10.1021/ci9903071>

Legend

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

Latest version available from:

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

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