

# Bismuthine, trimethyl-

<b>Other names:</b>	Bismuth trimethyl Trimethylbismutin bismuthine, trimethyl- (6Cl,7Cl,8Cl,9Cl) trimethylbismuth trimethylbismuthine
<b>Inchi:</b>	InChI=1S/3CH3.Bi/h3*1H3;
<b>InchiKey:</b>	AYDYYQHLYJDCDQ-UHFFFAOYSA-N
<b>Formula:</b>	C3H9Bi
<b>SMILES:</b>	C[Bi](C)C
<b>Mol. weight [g/mol]:</b>	254.08
<b>CAS:</b>	593-91-9

## Physical Properties

Property code	Value	Unit	Source
chl	-2912.00 ± 14.00	kJ/mol	NIST Webbook
hf	194.00 ± 14.00	kJ/mol	NIST Webbook
hfl	158.00 ± 14.00	kJ/mol	NIST Webbook
hvap	36.00 ± 1.30	kJ/mol	NIST Webbook
hvap	35.80	kJ/mol	NIST Webbook

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
pvap	0.48	kPa	258.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	0.48	kPa	258.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony

pvap	0.67	kPa	263.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	0.67	kPa	263.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	0.92	kPa	268.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	0.92	kPa	268.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	1.25	kPa	273.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	1.25	kPa	273.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	1.68	kPa	278.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	1.68	kPa	278.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	2.22	kPa	283.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	2.22	kPa	283.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony

pvap	2.92	kPa	288.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	2.91	kPa	288.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	3.78	kPa	293.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	3.78	kPa	293.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	4.84	kPa	298.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	4.84	kPa	298.45	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	6.13	kPa	303.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	6.13	kPa	303.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	7.71	kPa	308.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	7.71	kPa	308.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony

pvap	9.58	kPa	313.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony
pvap	9.58	kPa	313.35	Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony

## Sources

Vapor pressures of dimethylcadmium, trimethylbismuth, and tris(dimethylamino)antimony: <https://www.doi.org/10.1016/j.fluid.2013.09.017>  
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C593919&Units=SI>

## Legend

**chl:** Standard liquid enthalpy of combustion  
**hf:** Enthalpy of formation at standard conditions  
**hfl:** Liquid phase enthalpy of formation at standard conditions  
**hvap:** Enthalpy of vaporization at standard conditions  
**pvap:** Vapor pressure

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