

# 1,3-Diphenyltetramethyldisiloxane

Other names:	1,1,3,3-tetramethyl-1,3-diphenyldisiloxane 1,3-Diphenyl-1,1,3,3-tetramethyldisiloxane Bis(phenyldimethylsilyl)oxide Diphenyltetramethyldisiloxane Disiloxane, 1,1,3,3-tetramethyl-1,3-diphenyl- Disiloxane, 1,3-diphenyl-1,1,3,3-tetramethyl- Sym-tetramethyl-diphenyl-disiloxane Tetramethyl-1,3-diphenyldisiloxane
Inchi:	InChI=1S/C16H22OSi2/c1-18(2,15-11-7-5-8-12-15)17-19(3,4)16-13-9-6-10-14-16/h5-14H
InchiKey:	YQJPWWLJDNCSCN-UHFFFAOYSA-N
Formula:	C16H22OSi2
SMILES:	C[Si](C)(O[Si](C)(C)c1ccccc1)c1ccccc1
Mol. weight [g/mol]:	286.52
CAS:	56-33-7

## Physical Properties

Property code	Value	Unit	Source
log10ws	-7.87		Crippen Method
logp	3.228		Crippen Method
sl	559.70	J/molxK	NIST Webbook
tf	251.00	K	NIST Webbook
tf	250.00	K	NIST Webbook

## Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	508.10	J/molxK	298.15	NIST Webbook
cpl	508.10	J/molxK	298.15	NIST Webbook

rhoI	951.65	kg/m3	328.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	963.92	kg/m3	313.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	959.80	kg/m3	318.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	955.69	kg/m3	323.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	951.58	kg/m3	328.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	963.94	kg/m3	313.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K

rhoI	959.84	kg/m3	318.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	955.74	kg/m3	323.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	968.05	kg/m3	308.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	967.90	kg/m3	308.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	963.80	kg/m3	313.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	959.75	kg/m3	318.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K

rhoI	955.65	kg/m3	323.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	951.57	kg/m3	328.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	967.99	kg/m3	308.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	963.87	kg/m3	313.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	959.76	kg/m3	318.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K
rhoI	955.68	kg/m3	323.15	Volumetric and refractive properties of the mixtures of 1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	429.50 ± 1.50	K	1.70	NIST Webbook

## Sources

Volumetric and refractive properties of the mixtures of NIST Webbook  
1,1,3,3-tetramethyl-1,3-diphenyldisiloxane with various organosilicon compounds at T = (308.15 to 328.15) K: <https://www.doi.org/10.1021/acs.jced.5b00820>  
Crippen Method: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C56337&Units=SI>  
<http://pubs.acs.org/doi/abs/10.1021/ci990307l>  
[https://www.chemeo.com/doc/models/crippen\\_log10ws](https://www.chemeo.com/doc/models/crippen_log10ws)

## Legend

**cpl:** Liquid phase heat capacity  
**log10ws:** Log10 of Water solubility in mol/l  
**logp:** Octanol/Water partition coefficient  
**rhol:** Liquid Density  
**sl:** Liquid phase molar entropy at standard conditions  
**tbrp:** Boiling point at reduced pressure  
**tf:** Normal melting (fusion) point

Latest version available from:

<https://www.chemeo.com/cid/42-508-1/1-3-Diphenyltetramethyldisiloxane.pdf>

Generated by Cheméo on 2025-12-23 06:37:29.869506223 +0000 UTC m=+6220047.399546928.

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