

Chlorine dioxide

Other names:	Alcide Anthium dioxide Chlorine oxide Chlorine oxide (ClO ₂) Chlorine peroxide Chlorine(IV) oxide Chloroperoxyl Chloryl radical ClO ₂ Doxcide 50
Inchi:	InChI=1S/ClO2/c2-1-3
InchiKey:	OSVXSBDYLRYLIG-UHFFFAOYSA-N
Formula:	ClO ₂
SMILES:	[O][Cl+][O-]
Mol. weight [g/mol]:	67.45
CAS:	10049-04-4

Physical Properties

Property code	Value	Unit	Source
ie	10.33 ± 0.02	eV	NIST Webbook
ie	10.33 ± 0.02	eV	NIST Webbook
ie	10.35 ± 0.01	eV	NIST Webbook
ie	10.52 ± 0.06	eV	NIST Webbook
ie	10.77 ± 0.10	eV	NIST Webbook
ie	10.36 ± 0.02	eV	NIST Webbook
ie	10.70 ± 0.10	eV	NIST Webbook
ie	10.50 ± 0.10	eV	NIST Webbook
mvol	32.690	ml/mol	McGowan Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$

Coeff. A	1.47930e+01
Coeff. B	-2.37910e+03
Coeff. C	-5.02200e+01
Temperature range (K), min.	213.55
Temperature range (K), max.	465.00

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C10049044&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

ie:	Ionization energy
mcvol:	McGowan's characteristic volume
pvap:	Vapor pressure

Latest version available from:

<https://www.chemeo.com/cid/44-972-4/Chlorine-dioxide.pdf>

Generated by Cheméo on 2024-05-01 05:43:08.669338085 +0000 UTC m=+16831437.589915400.

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