rhenium

Inchi: InChl=1S/Re

InchiKey: WUAPFZMCVAUBPE-UHFFFAOYSA-N

 Formula:
 Re

 SMILES:
 [Re]

 Mol. weight [g/mol]:
 186.21

 CAS:
 7440-15-5

Physical Properties

Property code	Value	Unit	Source
ie	7.88	eV	NIST Webbook
ie	7.88	eV	NIST Webbook
ie	7.76 ± 0.03	eV	NIST Webbook
ie	7.88	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
dvisc	0.0149000	Pa×s	3034.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation
dvisc	0.0146000	Paxs	3050.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation
dvisc	0.0139000	Pa×s	3100.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation
dvisc	0.0132000	Paxs	3150.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation

dvisc 0.0125000 Paxs 3200.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0120000 Paxs 3250.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by olectrostatic levitation dvisc 0.0114000 Paxs 3300.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0109000 Paxs 3350.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0104000 Paxs 3400.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0100000 Paxs 3450.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0099000 Paxs 3459.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0096000 Paxs 3500.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0092000 Paxs 3500.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation dvisc 0.0092000 Paxs 3500.00 Viscosity of molten Mo, Ta, Os. Re, and W measured by electrostatic levitation						
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molten Mó, Ta, Os, Re, and W measured by electrostatic	dvisc	0.0092000	Paxs	3550.00	molten Mo, Ta, Os, Re, and W measured by electrostatic	
	dvisc	0.0088000	Paxs	3600.00	molten Mo, Ta, Os, Re, and W measured by electrostatic	

dvisc	0.0085000	Paxs	3650.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation	
dvisc	0.0084000	Paxs	3675.00	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation	

Correlations

Information Value

Property code	pvap		
Equation	ln(Pvp) = A + B/(T + C)		
Coeff. A	1.86540e+01		
Coeff. B	-8.02185e+04		
Coeff. C	-1.53810e+02		
Temperature range (K), min.	3303.15		
Temperature range (K), max.	5954.15		

Sources

Viscosity of molten Mo, Ta, Os, Re, and https://www.doi.org/10.1016/j.jct.2013.05.036 W measured by electrostatic levitation: http://webbook.nist.gov/cgi/cbook.cgi?ID=C74

http://webbook.nist.gov/cgi/cbook.cgi?ID=C7440155&Units=SI

The Yaws Handbook of Vapor Pressure:

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

Legend

dvisc: Dynamic viscosity ie: Ionization energy pvap: Vapor pressure

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