

	Vanadium	Niobium	Tantalum	Molybdenum	Tungsten
d	3.692767	3.915354	4.076980	4.114825	4.400224
A	2.010637	3.013789	2.591061	1.887177	1.896373
B	23	48	91	1223	90.3
α	0.5	0.8	1.05	3.9	1.2
c	3.8	4.2	4.2	3.25	3.25
c_0	-0.8816318	-1.5640104	1.215737	43.4475218	47.1346499
c_1	1.4907756	2.0055779	0.0271471	-31.9332978	-33.7665655
c_2	-0.397637	-0.4663764	-0.121735	6.0804249	6.2541999

Parameters from Ackland,G.J., and Thetford,R., 1987, Phil.Mag.A, 56, 15

$$\begin{aligned}
U_i = & \sum_j H(a_0 - R_{ij})B(a_0 - R_{ij})^3 e^{-\alpha R_{ij}} \\
& + \sum_j H(c - R_{ij})(c - R_{ij})^2 (c_0 + c_1 R_{ij} + c_2 R_{ij}) \\
& - \sqrt{\sum_j} H(d - R_{ij})A^2 (d - R_{ij})^2
\end{aligned}$$