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STRUCTURE OF PENTAKIS (UREA) DIOXOURANIUM(VI)NITRATE $\text{LUO}_2 (\text{OC} (\text{NH}_2)_2)_5 (\text{NO}_3)_2$

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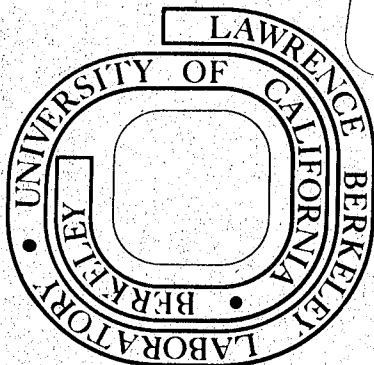
Allan Zalkin, Helena Ruben and David H. Templeton

August 1978

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STRUCTURE OF PENTAKIS(UREA)DIOXOURANIUM(VI)NITRATE,
 $[UO_2(OC(NH_2)_2)_5](NO_3)_2$

by Allan Zalkin*, Helena Ruben and David H. Templeton

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and

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AUGUST 1978

In our ongoing studies of uranium complexes we have determined the crystal structure of $UO_2(urea)_5(NO_3)_2$ by X-ray diffraction. Gentile and Campisi¹ reported the preparation of this compound and concluded, on the basis of infrared spectra, that the nitrate groups are not coordinated to uranium, a fact which we confirm. The uranyl ion is coordinated by oxygen atoms of the five urea molecules in a complex which is monomeric, not a polymer as suggested earlier.¹

From an aqueous solution of uranyl nitrate and urea which was allowed to evaporate slowly overnight, small fluorescent lime-green crystals precipitated. The crystals were stable in air and showed no decomposition during the two weeks the X-ray experiments were being conducted. Weissenberg photography showed the crystal to be monoclinic, and rough cell dimensions were obtained.

A crystal of dimensions .08 × .11 × .21 mm was glued to a glass fiber and examined with a Picker FACS-I automatic diffractometer equipped with a graphite monochromator and a Mo x-ray tube (λ $K\alpha_1$ 0.70930 Å). ω scans of the 800, 040, and 006 reflections showed peaks with half-widths of 0.16°, 0.15° and 0.11° respectively. The setting angles of 8 manually centered reflections ($16^\circ < 2\theta < 25^\circ$) using $MoK\beta$ (λ 0.632288 Å) and 3 reflections ($40^\circ < 2\theta < 43^\circ$) using $MoK\alpha_1$ were used to determine the cell parameters $a = 15.944(8)$ Å, $b = 8.952(4)$ Å, $c = 15394(6)$ Å, $\beta = 106.31(3)^\circ$, and $V = 2108.8$ Å³. The observed extinctions are unique to space group $P2_1/n$. For $Z=4$ and a molecular weight of 694.32 the calculated density is 2.19 g cm⁻³.

Intensity data were collected with a scan speed of 2°/min on 2θ . Each reflection was scanned from 0.7° before the $K\alpha_1$ peak to 0.7° after the $K\alpha_2$ peak, and backgrounds were counted for 4 s at each end of the scan range. The temperature during data collection was $21 \pm 1^\circ\text{C}$. Three standard reflections were measured after every 200th scan. The 10,524 scans, not including standards, resulted in 4869 unique intensities, 2954 of which were greater than 3σ . An absorption correction was applied,² $\mu = 73$ cm⁻¹, and the maximum and minimum corrections were 2.24 and 1.77 respectively. The intensities of all three standards decayed about 3% during the data collection period, and the data were corrected accordingly.

The trial coordinates of the uranium atom position was derived from a three dimensional Patterson function. The Fourier map,

calculated with the phases of the uranium atom alone, revealed eleven of the light atoms. A least-squares refinement and the subsequent Fourier calculation, phased by the twelve atoms, revealed the locations of the remaining atoms. A series of least-squares refinements in which the function $\sum w(|F_o| - |F_c|)^2 / \sum w F_o^2$ was minimized converged rapidly to the final structure. The expressions that were used in processing the data and estimating the weights are given in the supplementary material; the "ignorance factor", p , was set to 0.03. Scattering factors from Doyle and Turner³ were used, and anomalous dispersion corrections⁴ (for U $f' = -10.673$, $f'' = 9.654$) were applied. Hydrogen atoms could not be identified in the final difference maps and were not included in the least-squares refinement. The largest peak in the last difference Fourier map was 1.2 e. Anisotropic thermal parameters were included for all atoms refined. The discrepancy indices for 2954 data where $I > 3\sigma$ are

$$R = \frac{\sum ||F_o| - |F_c||}{\sum |F_o|} = 0.031$$

$$R_w = \left[\frac{\sum w(|F_o| - |F_c|)^2}{\sum w |F_o|^2} \right]^{1/2} = 0.032.$$

R for all 4869 data is 0.073. The error in an observation of unit weight is 1.09. In the last cycle no parameter changed more than 0.11σ .

A powder pattern, calculated from this structure and listed in the supplementary material, is consistent with the pattern published by Gentile and Campisi.¹

RESULTS AND DISCUSSION

Atomic parameters, distances, and angles are listed in Tables I-III. The molecular structure (Figure 1) consists of a uranium atom at the center of a pentagonal bipyramid of two uranyl oxygen atoms at each apex and of five urea oxygen atoms on the equator. The average U-O(urea) distance is 2.38 Å (corrected for thermal motion). The uranium atom and the equatorial atoms are all within 0.09 Å of their least-squares plane which is nearly perpendicular to the O-U-O axis. The geometry and bond distances and angles are in very close agreement with those found by a neutron diffraction study⁵ in $\text{UO}_2(\text{H}_2\text{O})(\text{urea})_4(\text{NO}_3)_2$, in which water occupies one of the coordination sites. In both structures the nitrate and urea groups are planar, and the nitrate ions have no close contacts to uranium.

Hydrogen bonding in the structure is mostly rather weak. There are only five N(urea) to O(nitrate or urea) distances that are less than 3 Å and only one of these is less than 2.9 Å; see Table II. As in the tetrakis(urea) compound there are numerous other N-O contacts in the range 3.0-3.3 Å which may be very weak hydrogen bonds, but there is no satisfactory way to assign all the hydrogen atoms to them. There are no N(urea) - O(uranyl) short distances.

SUPPLEMENTARY MATERIAL AVAILABLE: Data processing formulas, a table of anisotropic thermal parameters, calculated powder pattern, and the listing of structure factor amplitudes (22 pages). Ordering information is given on any current masthead page.

ACKNOWLEDGEMENT

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-

Table I. Postional Parameters with Estimated Standard Deviations^a
for $[\text{UO}_2(\text{OC}(\text{NH}_2)_2)_5][\text{NO}_3]_2$

ATOM	x	y	z
U	.10526(2)	.23262(3)	.35415(2)
O(1)	.2351(3)	.2567(6)	.4749(3)
O(2)	.2221(3)	.1642(7)	.2981(4)
O(3)	.0470(3)	.1537(6)	.2019(3)
O(4)	-.0473(3)	.2691(7)	.3158(4)
O(5)	.0692(3)	.3429(6)	.4807(3)
O(6)	.0933(3)	.0518(6)	.3944(4)
O(7)	.1176(4)	.4166(6)	.3192(4)
O(8)	.6173(4)	.0050(7)	.4578(4)
O(9)	.7213(5)	.1643(8)	.4926(5)
O(10)	.7080(5)	.0237(8)	.3782(5)
O(11)	.0014(4)	.2446(8)	.7611(4)
O(12)	.0511(4)	.1518(7)	.8930(4)
O(13)	.1235(4)	.1202(7)	.7956(4)
N(1)	.2544(5)	.5006(8)	.5172(5)
N(2)	.3484(5)	.3197(9)	.5930(5)
N(3)	.3676(5)	.1744(9)	.3638(5)
N(4)	.3080(5)	.2755(9)	.2204(6)
N(5)	.0893(8)	.078(1)	.0839(6)
N(6)	.0677(7)	.322(1)	.1021(7)
N(7)	.8104(5)	.306(1)	.2907(6)
N(8)	.8867(5)	.175(1)	.4180(6)

Table I. Continued

N(9)	.0250(5)	.3883(8)	.6045(4)
N(10)	.1122(5)	.1836(8)	.6007(5)
N(11)	.6821(5)	.0652(8)	.4426(6)
N(12)	.0592(5)	.1723(8)	.8174(5)
C(1)	.2775(5)	.359(1)	.5269(5)
C(2)	.2976(5)	.205(1)	.2940(6)
C(3)	.0671(5)	.184(1)	.1312(5)
C(4)	.8860(5)	.243(1)	.3415(6)
C(5)	.0691(5)	.3060(9)	.5612(5)

^aHere and in the following tables the numbers in parentheses are the estimated standard deviations in the least significant digit.

Table II. Interatomic Distances (Å)

<u>Uranium neighbors</u>			Corr. ^a
U	- O(6)	1.76(1)	1.78
	- O(7)	1.76(1)	1.78
	- O(1)	2.37(1)	2.38
	- O(2)	2.34(1)	2.36
	- O(3)	2.37(1)	2.38
	- O(4)	2.36(1)	2.38
	- O(5)	2.39(1)	2.40
 <u>Urea</u>			
C(1)	- O(1)	1.28(1)	1.28
C(2)	- O(2)	1.28(1)	1.29
C(3)	- O(3)	1.25(1)	1.25
C(4)	- O(4)	1.26(1)	1.26
C(5)	- O(5)	1.28(1)	1.28
C(1)	- N(1)	1.32(1)	1.35
	- N(2)	1.34(1)	1.37
C(2)	- N(3)	1.34(1)	1.36
	- N(4)	1.35(1)	1.37
C(3)	- N(5)	1.30(1)	1.39
	- N(6)	1.32(1)	1.39

Table II. Continued

C(4) - N(7)	1.36(1)	1.36
- N(8)	1.32(1)	1.41
C(5) - N(9)	1.32(1)	1.35
- N(10)	1.34(1)	1.37

Nitrate

N(11) - O(8)	1.25(1)	1.26
- O(9)	1.22(1)	1.26
- O(10)	1.23(1)	1.27
N(12) - O(11)	1.25(1)	1.30
- O(12)	1.22(1)	1.25
- O(13)	1.25(1)	1.28

Possible H bonds (under 3 Å)

N(4) - O(11)	2.98(1)
N(5) - O(12)	2.91(1)
N(6) - O(8)	2.99(1)
N(9) - O(5)	2.94(1)
N(9) - O(11)	2.85(1)

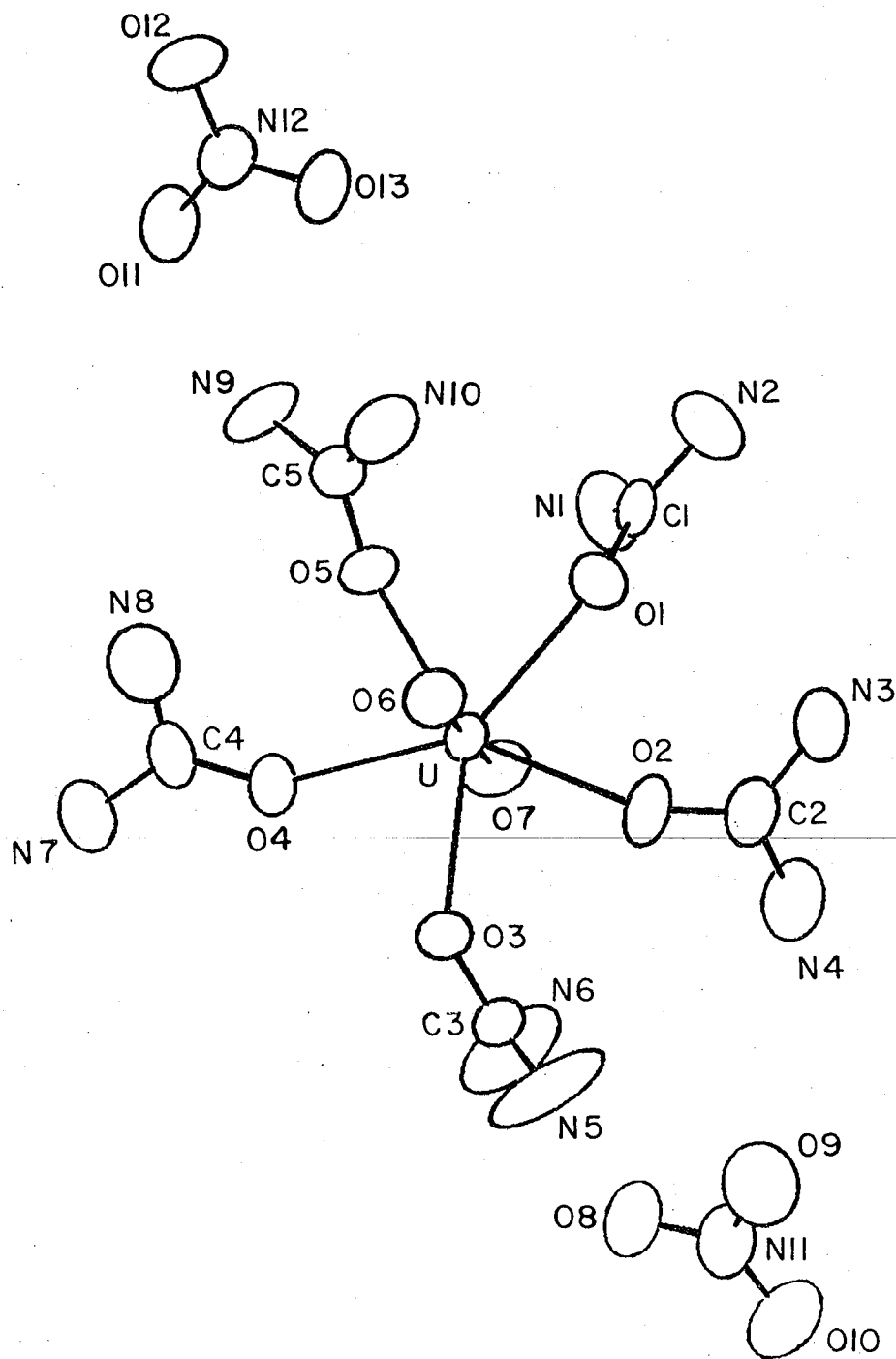
^aCorrected for thermal motion assuming the "riding" model.

Table III. Selected Angles (deg.)

O(6)	-U	-O(7)	177.3(3)	N(1)	-C(1)	-N(2)	119.0(8)
O(1)	-U	-O(2)	72.8(2)	N(3)	-C(2)	-N(4)	119.6(8)
O(2)	-U	-O(3)	71.9(2)	N(5)	-C(3)	-N(6)	117.9(9)
O(3)	-U	-O(4)	72.8(2)	N(7)	-C(4)	-N(8)	119.0(9)
O(4)	-U	-O(5)	71.3(2)	N(9)	-C(5)	-N(10)	119.9(8)
O(5)	-U	-O(1)	71.4(2)	O(1)	-C(1)	-N(1)	122.4(8)
O(6)	-U	-O(1)	88.1(2)	O(10)	-C(1)	-N(2)	118.6(8)
O(6)	-U	-O(2)	93.7(2)	O(2)	-C(2)	-N(3)	119.0(9)
O(6)	-U	-O(3)	91.3(2)	O(2)	-C(2)	-N(4)	121.4(9)
O(6)	-U	-O(4)	90.5(2)	O(3)	-C(3)	-N(5)	120.6(10)
O(6)	-U	-O(5)	91.1(2)	O(3)	-C(3)	-N(6)	121.6(9)
O(7)	-U	-O(1)	90.4(2)	O(4)	-C(4)	-N(7)	116.0(10)
O(7)	-U	-O(2)	88.0(3)	O(4)	-C(4)	-N(8)	124.7(8)
O(7)	-U	-O(3)	91.3(2)	O(5)	-C(5)	-N(9)	119.4(8)
O(7)	-U	-O(4)	89.4(3)	O(5)	-C(5)	-N(10)	120.7(8)
O(7)	-U	-O(5)	86.3(2)	O(8)	-N(11)	-O(9)	120.0(8)
C(1)	-O(1)	-U	138.6(6)	O(8)	-N(11)	-O(10)	120.2(9)
C(2)	-O(2)	-U	143.1(6)	O(9)	-N(11)	-O(10)	119.8(8)
C(3)	-O(3)	-U	132.3(6)	O(11)	-N(12)	-O(12)	118.9(7)
C(4)	-O(4)	-U	143.3(6)	O(11)	-N(12)	-O(13)	120.3(7)
C(5)	-O(5)	-U	138.1(6)	O(12)	-N(12)	-O(13)	120.8(7)

FIGURE CAPTION

Fig. 1. ORTEP view of $[\text{UO}_2(\text{OC}(\text{NH}_2)_2)_5][\text{NO}_3]_2$ showing the numbering scheme.



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Fig. 1

Supplemental materials for the paper:

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 $[\text{UO}_2(\text{OC}(\text{NH}_2)_2)_5](\text{NO}_3)_2$

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The Supplementary Tables which follow contain these data:

1. Data Processing Formulas
 2. Table of Anisotropic Thermal Parameters
 3. Calculated Powder Pattern
 4. Observed Structure Factors
-

DATA PROCESSING FORMULAE

$$I = C - (t_c/2t_b)(B_1+B_2)$$

$$\sigma(B) = \text{Max}[(t_c/2t_b)(B_1+B_2)^{\frac{1}{2}}, (t_c/2t_b)|B_1-B_2|]$$

$$\sigma(I) = [C + \sigma^2(B)]^{\frac{1}{2}}$$

$$F^2 = (D \cdot A/L_p)I$$

$$\sigma(F^2) = (D \cdot A/L_p)\sigma(I)$$

$$F_a^2 = \Sigma F^2/n$$

$$\sigma(F_a^2) = [\Sigma \sigma^2(F^2)/n]^{\frac{1}{2}} \quad \text{When } S(F_a^2) > 4\sigma(F_a^2), \sigma(F_a^2) \text{ is replaced by } S(F_a^2).$$

$$S(F_a^2) = [\Sigma |F^2 - F_a^2|^2/n(n-1)]^{\frac{1}{2}}$$

$$\sigma(F_o^2) = [\sigma^2(F_a^2) + (pF_a^2)^2 + q^2]^{\frac{1}{2}}$$

$$F_o = (F_a^2)^{\frac{1}{2}}$$

$$\sigma(F) = F_o - [F_a^2 - \sigma(F_o^2)]^{\frac{1}{2}} \text{ when } \sigma(F_o^2) \leq F_a^2 \text{ or } [\sigma(F_a^2)]^{\frac{1}{2}} \text{ when } \sigma(F_a^2) > F_a^2$$

$$L_p = [\cos^2 2\theta_m + \cos^2 2\theta] / [\sin 2\theta (1 + \cos^2 2\theta_m)]$$

$$\text{wtg} = 1/\sigma^2(F)$$

C = counts recorded during a scan

θ_m = monochromater angle

I = individual raw intensity,
background removed.

θ = crystal diffraction angle

S = scatter

t_c = scan count time

a = average

t_b = background count time

q = additional uncertainty that
affects the weak intensities

B_1 = individual background count

$\sigma(B)$ = estimated standard deviation of the total background count

p = estimate of non-statistical errors

F = structure factor

wtg = weighting factors in least squares

D = decay correction; an empirically applied correction obtained from the fluctuations of the standard reflections.

A = absorption correction

L_p = Lorentz and polarization corrections

Table of Anisotropic Thermal Parameters^a

ATOM	B11	B22	B33	B12	B13	B23
U	2.11(1)	3.07(1)	2.38(1)	-.13(1)	.900(7)	-.33(1)
O(1)	3.0(2)	4.1(3)	3.5(2)	-.1(2)	.5(2)	-1.1(2)
O(2)	3.1(3)	6.3(4)	5.7(3)	-.8(2)	2.5(3)	-2.2(3)
O(3)	3.2(2)	5.8(3)	2.4(2)	-.9(2)	.8(2)	-.5(2)
O(4)	2.4(2)	7.9(4)	4.1(3)	.6(3)	1.0(2)	-.8(3)
O(5)	3.9(3)	4.1(3)	2.4(2)	.6(2)	1.1(2)	.1(2)
O(6)	4.0(3)	3.6(3)	3.5(3)	-.3(2)	1.2(2)	.2(2)
O(7)	5.1(3)	4.3(3)	3.4(3)	-.4(2)	1.7(2)	.0(2)
O(8)	4.3(3)	5.0(3)	6.5(4)	-.6(3)	2.7(3)	.1(3)
O(9)	6.3(4)	4.6(4)	8.1(5)	-1.1(3)	1.8(4)	-1.9(3)
O(10)	7.5(5)	7.7(5)	6.9(4)	-1.7(4)	4.2(4)	-1.1(4)
O(11)	3.8(3)	9.5(5)	5.5(3)	2.3(3)	1.8(2)	4.4(3)
O(12)	6.8(4)	6.3(4)	2.8(3)	.3(3)	2.0(3)	1.3(3)
O(13)	3.4(3)	7.4(4)	5.2(3)	1.8(3)	2.1(3)	1.5(3)
N(1)	3.8(4)	3.1(3)	7.2(5)	-.2(3)	.9(3)	-.9(3)
N(2)	4.2(4)	5.0(4)	5.1(4)	-1.0(3)	-.5(3)	-1.0(3)
N(3)	3.0(3)	7.0(5)	5.6(4)	.1(3)	1.5(3)	.4(4)
N(4)	4.6(4)	5.9(5)	6.9(5)	1.2(3)	2.4(3)	2.2(4)
N(5)	16.9(10)	7.4(6)	6.4(5)	2.0(6)	8.4(6)	-.0(4)
N(6)	13.2(9)	6.3(6)	8.1(6)	.4(5)	7.5(6)	2.0(5)
N(7)	3.1(3)	16.8(9)	5.5(5)	2.0(5)	.5(3)	.1(6)
N(8)	5.2(5)	6.7(5)	6.3(5)	-1.1(4)	1.4(4)	1.5(4)
N(9)	6.8(5)	5.4(4)	3.6(3)	2.7(3)	3.3(3)	.5(3)
N(10)	6.1(5)	4.7(4)	4.6(4)	1.9(3)	2.7(4)	1.1(3)
N(11)	3.9(4)	3.7(4)	5.7(4)	.4(3)	1.7(4)	.7(3)
N(12)	3.6(3)	4.2(3)	3.9(3)	-.1(3)	1.6(3)	1.1(3)
C(1)	2.0(3)	4.8(5)	3.7(4)	-1.1(3)	1.6(3)	-1.4(3)
C(2)	3.4(4)	4.4(5)	5.3(5)	.0(3)	2.0(4)	-1.7(4)
C(3)	2.8(4)	6.6(5)	2.3(3)	-.5(3)	1.0(3)	-.0(3)
C(4)	2.2(3)	7.1(6)	5.2(4)	.4(4)	.7(3)	-2.6(5)
C(5)	3.3(4)	4.0(4)	2.8(4)	-.7(3)	.9(3)	.1(3)

^aThe anisotropic temperature factor has the form $\exp(-0.25(B_{11}h^2a^{*2} + 2B_{12}hka^*b^* + \dots))$.

CALCULATED POWDER PATTERN FOR UO₂(NH₂CONH₂)₅(NO₃)₂
X-RAY WAVE LENGTH = 1.54180 ANGSTROMS.

A = 15.944 B = 8.952 C = 15.394
ALPHA = 90.00 BETA = 106.31 GAMMA = 90.00

H	K	L	D	I	2 THETA	SINSQ
1	J	-1	12.532	2.	7.05	.00378
1	J	1	9.392	607.	9.42	.00674
1	L	0	7.727	16.	11.45	.00995
0	L	1	7.656	3.	11.56	.01014
2	J	0	7.651	36.	11.57	.01015
0	J	2	7.387	14.	11.98	.01089
1	L	-1	7.284	1000.	12.15	.01120
1	L	1	6.480	28.	13.66	.01415
2	J	-2	6.266	418.	14.13	.01514
2	L	-1	5.855	21.	15.13	.01734
2	L	0	5.816	731.	15.23	.01757
1	L	-2	5.763	17.	15.37	.01789
0	L	2	5.698	689.	15.55	.01831
3	J	-1	5.303	81.	16.72	.02113
2	L	-2	5.133	1.	17.27	.02255
1	J	-3	5.127	56.	17.30	.02261
2	L	1	5.057	3.	17.54	.02324
1	L	2	4.997	7.	17.75	.02380
2	J	2	4.696	60.	18.90	.02695
3	L	-1	4.562	2.	19.46	.02855
0	L	0	4.476	332.	19.83	.02966
3	J	1	4.451	42.	19.95	.02999
1	L	-3	4.449	1.	19.96	.03003
3	L	0	4.432	2.	20.03	.03026
1	J	3	4.346	66.	20.44	.03147
0	L	3	4.315	0.	20.58	.03192
1	L	0	4.296	3.	20.68	.03220
3	L	-2	4.290	4.	20.70	.03229
0	L	1	4.284	15.	20.73	.03239
2	L	-3	4.230	0.	21.00	.03321
1	L	-1	4.215	0.	21.08	.03345
3	J	-3	4.177	2.	21.27	.03406
2	L	2	4.159	12.	21.37	.03436
1	L	1	4.041	262.	22.00	.03640
3	L	1	3.986	131.	22.30	.03741
1	L	3	3.909	127.	22.75	.03889
2	L	-1	3.875	0.	22.95	.03958
4	J	-2	3.870	2.	22.98	.03969
2	L	0	3.863	28.	23.02	.03981
1	L	-2	3.848	10.	23.11	.04014
0	L	2	3.828	61.	23.24	.04055
4	J	0	3.826	87.	23.25	.04061
3	L	-3	3.785	108.	23.50	.04147
2	J	-4	3.766	2.	23.62	.04190
0	J	4	3.694	72.	24.09	.04356
2	L	-2	3.642	60.	24.44	.04480
4	L	-1	3.641	9.	24.45	.04484
2	L	1	3.614	0.	24.63	.04549
1	L	2	3.593	59.	24.78	.04604
4	L	-2	3.552	182.	25.07	.04710

OBSERVED STRUCTURE FACTORS, STANDARD DEVIATIONS, AND DIFFERENCES (ALL X 3.0)
 URANYL UREA NITRATE F(0,0,0) = 3596

FOB AND FCA ARE THE OBSERVED AND CALCULATED STRUCTURE FACTORS.
 SG = ESTIMATED STANDARD DEVIATION OF FOB. DEL = /FOB/ - /FCA/.
 * INDICATES ZERO WEIGHTED DATA.

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
H _o K _o = 0,	0		0	2	648	10	10	15	45	49	-5*	H _o K _o = 0,	0,	9	-19	157	16		19
2	153	3	-11	3	141	4	-4	16	129	11	7	1	108	10	4	-18	47	57	44*
4	791	12	21	4	358	6	7	17	106	15	15	2	135	9	-16	-17	107	14	1
6	490	8	-8	5	39	12	9*	H _o K _o = 0,	6	3	200	8	6	-16	41	55		3*	
8	265	5	-9	6	351	6	-8	0	227	6	-8	4	62	23	15*	-15	290	7	-8
10	274	5	2	7	221	5	-7	1	254	6	-3	5	30	51	12*	-14	0	44	-24*
12	51	20	-9*	8	481	8	2	2	190	5	2	6	94	17	-5	-13	55	24	44*
14	262	6	-10	9	34	43	4*	3	173	7	-7	7	169	11	4	-12	19	38	14*
16	134	22	1	10	116	8	-3	4	298	6	5	8	97	19	1*	-11	412	8	-7
18	143	11	-11	11	119	7	6	5	243	5	-9	9	24	54	-34*	-10	12	42	-4*
H _o K _o = 0,	1			12	344	7	0	6	220	9	-4	10	39	55	21*	-9	240	5	3
1	34	11	-14*	13	146	10	2	7	38	32	36*	11	123	13	2	-8	68	6	9
2	106	1	28	14	106	15	-10	8	110	9	2	12	60	73	-19*	-7	658	10	5
3	42	5	14	15	18	47	-31*	9	188	9	-6	H _o K _o = 0,	10	-6	61	6	5		
4	74	7	11	16	196	8	-7	10	275	6	-9	0	116	15	16	-5	780	12	6
5	219	4	0	17	82	19	17*	11	88	12	7	1	137	10	2	-4	23	15	14*
6	269	5	-9	18	143	14	17	12	51	26	17*	2	0	60	-23*	-3	39	6	-10
7	97	5	-3	H _o K _o = 0,	4			13	146	8	17	3	51	55	-14*	-2	166	3	0
8	62	9	10	0	585	12	-1	14	154	9	4	4	74	19	8*	-11	1003	17	-1
9	31	32	5*	1	208	4	2	15	124	17	23	5	165	9	-6	0	115	3	-4
10	14	6	5	2	144	5	-1	16	81	21	2*	6	70	22	-3*	1	191	3	3
11	10	3	15	3	32	18	14*	H _o K _o = 0,	7			7	33	53	21*	2	120	3	1
12	34	9	7	4	396	7	-5	1	193	5	-3	8	53	70	23*	3	699	11	18
13	42	30	0*	5	276	5	-2	2	262	5	3	9	135	12	13	4	287	5	2
14	93	13	-11	6	351	7	-4	3	223	6	-4	H _o K _o = 0,	11	5	533	8	-28		
15	33	44	19*	7	101	6	7	4	137	8	-6	1	71	25	-18*	6	75	5	11
16	22	8	4	8	240	5	7	5	18	54	-9*	2	41	55	-24*	7	243	4	4
17	27	50	11*	9	169	8	1	6	149	7	-2	3	134	13	1	8	0	39	-22*
18	14	3	18	10	430	7	-15	7	202	6	-7	4	73	34	52*	9	484	8	0
19	49	58	40*	11	105	16	4	8	201	6	0	5	29	54	9*	10	64	10	-5
H _o K _o = 0,	2			12	44	48	28*	9	51	22	34*	6	73	23	50*	11	31	36	-1*
0	136	5	21	13	158	8	4	10	0	52	-26*	H _o K _o = 1,	0	12	0	38	-13*		
1	20	9	4	14	229	7	-5	11	148	10	-1	-19	135	12	2	13	307	6	0
2	52	4	10	15	128	9	24	12	170	10	-1	-17	203	9	-5	14	60	17	18*
3	34	4	5	16	112	13	6	13	78	29	-18*	-15	118	11	-7	15	183	8	2
4	53	1	9	17	36	60	-8*	14	31	53	-20*	-13	400	7	-4	16	58	23	50*
5	97	4	4	18	91	21	-2*	15	85	19	33*	-11	65	14	-12*	17	191	9	4
6	49	9	8	H _o K _o = 0,	5			H _o K _o = 0,	8	-9	576	9	20	18	0	53	-32*		
7	47	15	-4*	1	245	7	-4	0	184	8	11	-7	524	8	-8	H _o K _o = 1,	2		
8	25	2	5	2	552	11	4	1	149	10	-10	-5	541	8	13	-19	124	22	2
9	10	5	7	3	345	8	5	2	68	21	19*	-3	479	7	-2	-18	60	29	5*
10	40	5	7	4	186	5	-4	3	112	15	0	-1	0217	-39*	-17	207	7	2	
11	51	15	-7*	5	73	8	8	4	114	8	11	1	819	12	-36	-16	0	48	-11*
12	0	38	-5*	6	287	6	5	5	215	8	0	3	628	10	6	-15	85	15	0
13	11	8	-4	7	199	16	5	6	167	7	-8	5	607	9	-11	-14	0	48	-60*
14	30	4	6	8	322	6	1	7	0	45	-3*	7	613	9	7	-13	404	7	2
15	56	62	-14*	9	36	38	25*	8	91	15	5	9	105	7	3	-12	108	7	0
16	13	4	12	10	72	12	-3	9	182	8	11	11	349	6	-7	-11	172	6	-4
17	48	69	29*	11	147	7	-1	10	138	14	-6	13	96	9	-2	-18	0	41	-8*
18	14	1	14	12	252	6	-2	11	84	20	2*	15	227	8	1	-9	647	10	-3
H _o K _o = 0,	3			13	78	18	-20*	12	0	62	-12*	17	114	12	-13	-8	29	37	9*
1	0	25	-33*	14	57	26	-12*	13	87	26	3*	H _o K _o = 1,	1	-7	345	6	4		

STRUCTURE FACTORS CONTINUED FOR
URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	
-6	167	4	5	12	107	12	3	-6	198	5	4	15	132	11	10	7	159	10	-4	
-5	330	6	8	13	292	6	-5	-5	446	9	6	16	89	20	-14*	8	74	20	16*	
-4	170	3	-1	14	52	24	8*	-4	101	6	-7		H _o K#	1,	7	9	34	46	24*	
-3	629	10	1	15	115	10	3	-3	52	11	9*	-15	93	18	-10*	10	135	13	-11	
-2	191	3	-4	16	5	49	-18*	-2	306	8	9	-14	65	27	-20*	11	109	19	-14	
-1	23	23	6*	17	126	12	-7	-1	512	10	-1	-13	0	53	-19*	12	117	17	10	
0	98	4	7	18	89	17	19*	0	227	7	-7	-12	118	10	14	13	43	57	0*	
1	939	15	-4		H _o K#	1,	4	1	161	5	-2	-11	197	7	1		H _o K#	1,	9	
2	505	11	0	-18	108	14	42	2	86	7	-21	-10	213	7	15	-12	66	71	-7*	
3	285	5	11	-17	158	10	11	3	415	9	-4	-9	67	32	-10*	-11	77	22	-21*	
4	202	4	8	-16	35	64	-18*	4	371	9	1	-8	57	21	-7*	-10	165	9	2	
5	320	5	-3	-15	58	27	-5*	5	400	9	3	-7	246	6	-5	-9	50	39	13*	
6	229	4	3	-14	83	18	0*	6	62	11	10	-6	231	6	1	-8	38	48	35*	
7	54	1	9	0	-13	256	6	0	7	216	6	7	-5	212	6	-8	-7	93	14	-21
8	34	36	25*	-12	169	8	-14	8	198	9	-1	-4	81	11	-8	-6	170	8	-9	
9	151	5	4	-11	94	10	10	9	237	5	-8	-3	73	19	29*	-5	81	28	-16*	
10	27	35	9*	-10	125	11	-8	10	113	8	12	-2	151	6	-1	-4	66	18	8*	
11	35	8	6	-9	-9	366	6	8	11	47	24	14*	-1	290	9	-1	-3	37	51	25*
12	0	53	-13*	-8	173	7	4	12	82	13	-7	0	197	7	-4	-2	148	10	-5	
13	80	14	10	-7	320	6	-9	13	174	7	-6	1	67	12	19	-1	144	13	2	
14	49	26	-3*	-6	49	16	11*	14	69	20	-13*	2	138	6	3	0	130	12	-7	
15	245	10	-2	-5	253	5	4	15	59	72	-18*	3	186	6	5	1	34	49	2*	
16	0	51	-14*	-4	238	5	6	16	34	57	5*	4	255	6	0	2	77	26	-6*	
17	127	17	-9	-3	650	12	-4	17	55	65	-17*	5	204	8	-13	3	67	19	-16*	
18	34	57	27*	-2	44	15	19*		H _o K#	1,	6	6	24	40	14*	4	160	9	-8	
	H _o K#	1,	3	-1	26	28	5*	-16	82	18	25*	7	65	16	-24*	5	88	28	-5*	
-18	41	53	18*	0	211	5	-12	-15	72	22	15*	8	210	8	4	6	61	24	20*	
-17	115	12	-4	1	561	11	0	-14	89	17	-7*	9	185	7	-4	7	23	53	-18*	
-16	61	22	4*	2	404	8	3	-13	131	9	12	10	93	16	-8	8	166	8	2	
-15	254	8	-3	3	432	9	-7	-12	140	9	0	11	36	56	-5*	9	99	18	-9*	
-14	74	17	-15*	4	142	5	4	-11	0	45	-40*	12	99	13	-3	10	68	26	-21*	
-13	47	23	40*	5	269	6	-4	-10	33	45	-18*	13	124	13	-4	11	36	52	27*	
-12	48	21	-3*	6	249	5	-3	-9	241	6	-8	14	105	18	3		H _o K#	1,	10	
-11	396	7	-1	7	352	6	-2	-8	262	6	-4	15	54	57	-6*	-10	20	60	-17*	
-10	117	7	-4	8	116	6	-11	-7	199	7	-12		H _o K#	1,	8	-9	66	28	-7*	
-9	239	5	-1	9	101	10	9	-6	26	42	9*	-14	116	13	22	-8	140	13	4	
-8	0	34	-2*	10	83	11	22	-5	152	7	6	-13	129	11	21	-7	21	55	-31*	
-7	414	7	1	11	285	6	1	-4	212	5	-4	-12	128	12	4	-6	16	63	-15*	
-6	81	8	-12	12	96	10	12	-3	519	10	0	-11	34	49	27*	-5	37	53	-8*	
-5	648	11	0	13	60	19	-2*	-2	146	5	-2	-10	43	47	5*	-4	142	10	-2	
-4	34	12	-8*	14	70	28	5*	-1	7	35	-15*	-9	137	17	-4	-3	69	24	-21*	
-3	26	30	-7*	15	206	7	-3	0	155	6	-7	-8	218	7	-5	-2	115	16	-3	
-2	485	8	9	16	107	11	54	1	423	9	-10	-7	117	13	-7	-1	27	56	26*	
-1	784	13	6	17	125	17	-3	2	227	7	5	-6	36	43	7*	0	110	22	2*	
0	34	1	6	3		H _o K#	1,	5	3	213	7	-4	-5	60	19	-23*	1	83	16	-8*
1	74	4	-6	-17	115	17	19	4	71	10	1	-4	173	9	-4	2	150	10	-5	
2	178	4	4	-16	91	16	4	5	171	9	1	-3	217	6	-1	3	14	54	-16*	
3	511	8	-3	-15	147	24	-6*	6	253	8	-1	-2	171	7	7	4	2	50	-26*	
4	360	6	7	-14	88	13	16	7	288	6	1	-1	15	41	6*	5	48	50	6*	
5	464	8	0	-13	44	50	16*	8	51	19	-11*	0	147	9	-1	6	159	10	4	
6	28	30	-4*	-12	117	9	8	9	37	46	-17*	1	177	6	2	7	97	24	14*	
7	213	4	-2	-11	264	6	2	10	120	9	0	2	163	7	-8	8	22	59	-28*	
8	78	7	9	-10	141	7	-4	11	179	10	5	3	105	9	4	9	40	53	28*	
9	408	7	-7	-9	140	6	0	12	129	9	9	4	46	29	2*		H _o K#	1,	11	
10	59	16	13*	-8	34	46	-6*	13	78	16	22*	5	104	18	0	-6	107	30	-15*	
11	23	38	-14*	-7	299	6	5	14	44	58	-10*	6	203	10	2	-5	52	64	17*	

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL		
-4	86	18	36*	5	17	28	-8*	-17	33	50	-18*	2	425	8	9	-12	237	6	-1		
-3	52	57	40*	6	627	10	8	-16	95	12	9	3	230	5	-4	-11	149	8	5		
-2	116	14	5	7	6	31	-11*	-15	84	15	-1	4	238	6	-8	-11	109	11	5		
-1	48	58	-14*	8	126	5	-10	-14	299	7	-3	5	40	15	16*	-9	52	25	4*		
0	136	11	19	9	59	11	6*	-13	178	11	-2	6	265	5	-1	-8	164	6	-4		
1	0	53	-25*	10	378	6	-3	-12	108	8	1	7	162	6	-2	-7	230	5	0		
2	69	38	10*	11	17	41	-29*	-11	52	16	7*	8	338	6	-4	-6	297	7	-4		
3	75	21	30*	12	63	14	2*	-10	481	8	-8	9	99	9	-1	-5	123	7	4		
4	137	12	6	13	43	31	11*	-9	213	5	-1	10	43	24	15*	-4	137	8	-8		
5	49	55	9*	14	210	7	5	-8	365	8	2	11	12	42	-25*	-3	233	5	2		
6	42	55	32*	15	23	49	17*	-7	23	29	3*	12	255	6	-3	-2	404	8	0		
	H ₂ O	=	2,	8	16	132	10	13	-6	287	5	-4	13	158	9	8	-1	252	7	1	
-18	78	20	-35*	17	71	19	58*	-5	47	8	13	14	120	13	8	0	110	6	11		
-16	22	6	8	18	118	13	18	-4	645	11	-3	15	53	30	41*	1	184	5	-2		
-14	77	11	10		H ₂ O	=	2,	2	-3	216	5	19	16	148	13	17	2	326	7	8	
-12	38	5	7	-4	-19	40	53	33*	-2	167	3	6	17	91	17	12*	3	296	8	-4	
-10	29	6	6	9	-18	98	15	-8	-1	151	3	-3		H ₂ O	=	2,	5	4	247	5	3
-8	54	0	9	-14	-17	31	49	-22*	0	310	6	-17	-17	66	26	5*	5	20	39	0*	
-6	27	2	5	-4	-16	231	7	5	1	143	3	15	-16	62	27	-1*	6	159	6	4	
-4	13	4	3	4	-15	32	46	8*	2	289	5	5	-15	103	14	13	7	191	6	1	
-2	100	9	18	-61	-14	47	27	-12*	3	224	4	18	-14	197	7	4	8	249	7	-3	
0	25	0	4	3	-13	0	41	-10*	4	322	7	-4	-13	159	8	4	9	83	12	-3	
2	52	7	8	-19	-12	405	7	-9	5	381	7	7	-12	54	22	-8*	10	24	43	9*	
4	82	7	13	24	-11	151	5	10	6	475	8	0	-11	63	28	8*	11	101	11	3	
6	33	1	6	0	-10	283	6	9	7	93	6	1	-10	330	7	-4	12	182	7	2	
8	55	7	9	-11	-9	39	16	19*	8	220	5	-4	-9	220	5	-3	13	72	21	-24*	
10	62	11	-3*	-8	380	6	-10	9	88	8	0	-8	195	5	8	14	88	17	19*		
12	26	7	6	-3	-7	88	5	5	10	396	7	-2	-7	11	35	-25*	15	47	52	29*	
14	13	0	8	-3	-6	554	9	-3	11	149	7	-6	-6	159	8	-2		H ₂ O	=	2,	7
16	17	8	0	6	-5	218	4	3	12	98	11	-9	-5	171	5	-1	-15	120	13	30	
18	14	8	13	5	-4	133	3	9	13	92	20	14*	-4	599	12	-8	-14	114	13	-15	
	H ₂ O	=	2,	1	-3	6	22	-12*	14	235	6	-2	-3	25	35	-9*	-13	111	21	6*	
-19	49	53	30*	-2	478	7	-27	15	29	48	-19*	-2	76	7	9	-12	83	14	36		
-18	15	7	12	-6	-1	28	10	-7*	16	126	11	-1	-1	185	6	2	-11	87	13	26	
-17	51	33	40*	0	314	5	-9	17	41	51	32*	0	422	10	-12	-18	161	12	-21		
-16	9	3	12	1	1	10	25	-33*		H ₂ O	=	2,	4	1	290	7	-2	-9	189	8	12
-15	0	47	-35*	2	372	6	2	-18	115	17	20	2	187	4	10	-8	113	9	-6		
-14	35	7	7	0	3	32	12	-2*	-17	92	15	18	3	26	36	13*	-7	42	36	-26*	
-13	9	3	9	-7	4	583	9	3	-16	176	8	-4	4	244	6	-4	-6	132	7	-10	
-12	11	0	7	-5	5	85	6	-4	-15	55	25	1*	5	276	7	3	-5	186	6	-10	
-11	16	39	5*	6	305	5	-10	-14	42	43	38*	6	270	5	0	-4	272	6	-3		
-10	40	1	7	-7	7	194	5	-1	-13	38	47	19*	7	132	6	-1	-3	210	5	-3	
-9	12	5	5	5	8	486	8	-14	-12	359	7	-6	8	141	7	-5	-2	55	15	43*	
-8	47	2	8	0	9	28	34	9*	-11	149	6	5	9	178	6	-2	-1	188	6	1	
-7	11	3	5	13	10	30	36	17*	-10	250	6	-11	10	291	6	5	0	233	7	7	
-6	32	3	5	8	11	28	38	-15*	-9	0	36	-28*	11	104	10	-3	1	243	5	-3	
-5	35	8	13*	12	310	8	0	-8	346	8	2	12	86	14	-9	2	151	7	-12		
-4	83	9	18	-9	13	104	12	-5	-7	210	6	4	13	65	22	-21*	3	51	51	-3*	
-3	22	12	-1*	14	145	8	-13	-6	466	8	-16	14	161	9	-10	4	119	10	-13		
-2	44	4	7	15	56	22	48*	-5	85	6	5	15	78	19	6*	5	225	7	2		
-1	17	4	3	-9	16	186	9	-4	-4	72	6	-9	16	99	26	-9*	6	181	6	-5	
0	107	0	25	-10	17	57	57	20*	-3	246	8	-1		H ₂ O	=	2,	6	7	49	25	-6*
1	91	3	10	18	155	10	11	-2	667	13	11	-16	133	15	0	8	50	53	1*		
2	18	7	3	-12		H ₂ O	=	2,	3	-1	87	5	0	-15	90	15	12	9	179	7	3
3	29	0	5	-3	-19	34	54	-9*	0	29	19	1*	-14	38	48	33*	10	178	7	0	
4	50	3	8	-5	-18	159	21	-1	1	99	5	-2	-13	48	72	-6*	11	103	29	9*	

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
12	88	14	15	11	83	24	-5*-19	119	16	10	-2	123	4	21	16	67	24	15*	
13	64	29	-3*		H,K=	2,	10	-18	34	52	4*	-1	641	11	1	17	120	16	-27
14	105	15	-9	-10	49	61	33*-17	206	13	6	0	330	5	-3		H,K=	3,	4	
	H,K=	2,	8	-9	60	30	33*-16	49	32	6*	1	47	6	-6	-18	41	53	-17*	
-14	59	32	53*	-8	35	52	-14*-15	42	43	36*	2	181	5	23	-17	73	23	-4*	
-13	73	31	-5*	-7	157	14	-3	-14	9	41	3*	3	448	7	-1	-16	76	17	13*
-12	132	16	9	-6	78	21	11*-13	378	7	2	4	314	5	4	-15	195	9	-5	
-11	138	10	9	-5	47	57	-2*-12	31	37	7*	5	558	9	7	-14	86	17	-7*	
-10	85	15	11	-4	57	26	41*-11	224	5	-2	6	99	6	-1	-13	40	60	-6*	
-9	39	46	34*	-3	130	11	-5	-10	54	12	-7*	7	113	5	-5	-12	57	16	8*
-8	132	9	3	-2	110	18	-3	-9	419	7	11	8	137	5	-4	-11	327	7	-1
-7	221	11	6	-1	152	9	8	-8	27	31	16*	9	480	8	2	-10	182	6	11
-6	111	13	-11	0	22	63	-5*	-7	747	12	8	10	14	40	-18*	-9	269	5	6
-5	87	15	13	1	40	51	-22*	-6	341	6	13	11	53	18	-12*	-8	31	45	19*
-4	44	47	9*	2	56	57	-20*	-5	51	6	6	12	84	13	-1	-7	133	6	3
-3	143	9	-4	3	178	8	5	-4	98	3	16	13	288	6	-14	-6	307	6	4
-2	234	7	-7	4	50	50	0*	-3	687	11	37	14	73	15	34*	-5	560	10	1
-1	188	8	-1	5	45	59	31*	-2	110	3	3	15	165	8	-11	-4	133	5	1
0	0	46	-27*	6	51	51	20*	-1	69	3	-2	16	53	54	30*	-3	0	29	-28*
1	72	18	1*	7	123	13	-10	0	64	3	-12	17	91	24	-8*	-2	218	5	3
2	145	7	6	8	70	27	3*	1	707	11	30		H,K=	3,	3	-1	552	11	-3
3	241	7	1	9	81	21	8*	2	122	3	-3	-19	113	13	14	0	230	5	8
4	121	11	-6		H,K=	2,	11	3	278	5	13	-18	73	28	21*	1	224	7	-11
5	40	43	27*	-6	47	55	16*	4	0	26	-1*	-17	218	10	1	2	32	37	0*
6	78	14	-9	-5	126	13	-1	5	408	7	16	-16	57	25	44*	3	356	8	1
7	176	7	-10	-4	73	22	29*	6	182	4	3	-15	0	48	-3*	4	267	6	8
8	144	10	5	-3	104	14	15	7	550	9	-1	-14	35	56	-4*	5	473	9	4
9	100	13	1	-2	43	52	40*	8	63	12	-1*-13	366	7	-7	6	192	6	3	
10	7	51	0*	-1	100	15	3	9	0	36	-19*-12	125	8	2	7	207	6	-7	
11	120	18	12	0	75	21	12*	10	27	45	21*-11	181	6	-3	8	182	5	-8	
12	108	14	1	1	143	15	5	11	411	7	-6	-10	55	14	-5*	9	287	6	2
13	80	22	-10*	2	0	55	-34*	12	59	26	1*	-9	383	6	-2	10	112	10	-7
	H,K=	2,	9	3	0	54	-24*	13	231	6	5	-8	196	5	-1	11	66	16	-2*
-12	44	52	27*	4	0	60	-23*	14	17	49	-5*	-7	389	8	-4	12	91	17	14*
-11	64	25	17*	5	150	12	19	15	172	9	0	-6	176	4	0	13	234	8	-1
-10	68	26	-12*		H,K=	3,	0	16	0	50	-15*	-5	46	9	-9*	14	58	25	-4*
-9	173	8	11	-19	159	10	-6	17	167	9	7	-4	138	5	-3	15	115	20	-18
-8	62	24	-17*-17	46	51	9*	18	35	53	26*	-3	605	11	-2	16	52	41	33*	
-7	57	66	22*-15	345	7	8		H,K=	3,	2	-2	277	6	3	17	42	56	-21*	
-6	89	13	9	-13	84	17	11*-19	174	11	16	-1	69	5	0		H,K=	3,	5	
-5	200	9	-6	-11	374	7	-2	-18	70	20	41*	0	219	4	14	-17	148	10	-4
-4	104	15	-2	-9	579	10	5	-17	28	60	-33*	1	469	10	-13	-16	86	15	20
-3	100	12	-12	-7	182	4	-1	-16	67	27	-9*	2	108	5	1	-15	0	54	-13*
-2	0	46	-8*	-5	700	11	-20	-15	294	6	-4	3	401	7	-6	-14	96	15	18
-1	116	13	8	-3	98	3	-3	-14	77	12	8	4	72	6	4	-13	182	8	-6
0	130	9	6	-1	566	9	7	-13	128	10	2	5	238	5	-1	-12	123	8	-6
1	207	7	-10	1	502	8	21	-12	40	25	17*	6	102	6	4	-11	120	8	1
2	79	15	-2*	3	836	13	-9	-11	464	8	-4	7	404	7	-6	-18	78	11	9
3	49	34	-17*	5	752	12	6	-10	68	9	-4	8	133	6	-8	-9	247	6	-6
4	46	51	-39*	7	148	6	1	-9	496	9	1	9	61	15	11*	-8	211	6	0
5	161	8	15	9	560	9	4	-8	73	7	11	18	45	22	-5*	-7	255	6	1
6	92	17	-4*	11	81	12	16	-7	228	5	-10	11	373	7	-4	-6	131	8	-15
7	65	39	-1*	13	293	6	6	-6	42	14	-8*	12	100	11	-8	-5	98	6	2
8	0	49	-27*	15	191	12	-5	-5	680	11	6	13	131	13	-2	-4	220	6	-6
9	124	21	6	17	119	12	0	-4	48	7	2	14	44	45	20*	-3	537	12	-10
10	184	13	17		H,K=	3,	1	-3	158	4	10	15	179	11	2	-2	236	7	-2

STRUCTURE FACTORS CONTINUED FOR
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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
-1	117	6	3	-12	153	8	10	-12	126	13	2	H ₂ K=	4,	0	17	16	54	-6*	
0	111	5	10	-11	78	22	3*	-11	11	59	-23*	-18	223	7	10	H ₂ K=	4,	2	
1	386	10	-3	-10	50	53	37*	-10	37	59	26*	-16	65	17	33*	-19	12	53	-29*
2	259	7	-8	-9	200	6	1	-9	91	14	3	-14	394	7	-2	-18	186	14	-10
3	495	10	-1	-8	258	6	-3	-8	163	8	-1	-12	140	9	-8	-17	47	41	14*
4	19	34	5*	-7	178	7	7	-7	125	10	22	-10	403	7	10	-16	26	58	21*
5	246	6	-2	-6	24	49	-30*	-6	60	22	2*	-8	485	8	7	-15	77	17	17*
6	202	7	-11	-5	88	10	2	-5	54	55	27*	-6	53	7	-12	-14	360	7	-5
7	280	6	-1	-4	165	6	0	-4	174	7	8	-41	296	20	-9	-13	129	7	14
8	138	8	-2	-3	328	6	-4	-3	134	9	-5	-2	125	3	18	-12	170	6	-11
9	54	29	9*	-2	212	5	0	-2	155	8	11	0	860	13	44	-11	62	16	0*
10	94	9	19	-1	52	22	38*	-1	52	25	37*	2	298	5	-14	-10	396	6	-1
11	223	7	-7	0	109	8	2	0	107	10	11	4	615	10	24	-9	200	5	2
12	125	11	2	1	192	8	-10	1	112	10	15	6	553	9	-3	-8	597	10	-1
13	87	18	10*	2	265	6	0	2	185	8	-7	8	77	8	0	-7	218	4	1
14	71	18	37*	3	212	6	-4	3	91	13	0	10	431	8	-5	-6	144	4	-8
15	116	13	-3	4	53	21	10*	4	0	58	-18*	12	157	6	6	-5	31	19	-1*
16	96	16	16	5	112	11	-6	5	48	42	-3*	14	174	7	-1	-4	920	16	-1
	H ₂ K=	3,	6	6	171	8	14	6	149	9	-12	16	160	12	-7	-3	283	5	9
-17	82	50	25*	7	184	7	7	7	99	16	-8	H ₂ K=	4,	1	-2	176	3	9	
-16	32	57	-42*	8	113	10	2	8	97	16	16	-19	26	53	15*	-1	274	5	3
-15	137	11	9	9	0	52	-3*	9	0	52	-7*	-18	65	23	-5*	0	551	9	9
-14	88	14	3	10	134	9	17	10	75	23	-8*	-17	0	61	-28*	1	246	4	6
-13	48	32	25*	11	152	9	11	11	34	62	-36*	-16	308	6	3	2	354	6	-7
-12	29	50	-19*	12	75	30	-21*	H ₂ K=	3,	10	-15	0	43	-14*	3	135	5	5	
-11	265	6	-2	13	87	31	16*	-10	114	19	0	-14	77	18	-18*	4	522	9	11
-10	191	7	1	14	0	55	-29*	-9	21	55	-24*	-13	39	32	26*	5	209	4	3
-9	102	11	12	H ₂ K=	3,	8	-8	-8	57	32	43*	-12	369	7	6	6	540	9	-14
-8	53	26	-4*	-14	98	30	-8*	-7	76	28	40*	-11	87	11	-10	7	0	34	-11*
-7	173	6	-6	-13	12	55	3*	-6	164	8	22	-10	225	5	-7	8	24	42	-8*
-6	271	8	6	-12	54	56	0*	-5	69	21	2*	-9	0	31	-2*	9	80	9	2
-5	291	6	-3	-11	138	10	-8	-4	64	26	-31*	-8	364	7	15	10	374	7	-11
-4	227	10	-2	-10	192	7	12	-3	39	51	36*	-7	72	8	-17	11	128	18	1
-3	44	17	7*	-9	79	21	1*	-2	112	16	-5	-6	609	10	7	12	181	8	4
-2	135	7	-5	-8	19	50	-3*	-1	86	16	-9*	-5	164	3	0	13	25	56	21*
-1	393	10	-6	-7	87	13	-12	0	167	13	10	-4	20	30	6*	14	192	7	-2
0	260	6	-3	-6	208	6	-5	1	57	58	9*	-3	129	3	15	15	48	40	13*
1	162	6	0	-5	154	7	-7	2	0	54	-35*	-2	912	14	10	16	151	24	-17
2	16	45	-16*	-4	132	10	1	3	71	38	-1*	-1	214	4	17	17	57	62	53*
3	216	6	-10	-3	17	58	3*	4	158	12	11	0	864	13	43	H ₂ K=	4,	3	
4	280	8	-3	-2	135	8	2	5	67	31	1*	1	218	4	19	-19	26	54	-16*
5	288	6	-6	-1	169	7	-8	6	19	58	-29*	2	529	8	-11	-18	97	26	27*
6	65	13	27*	0	189	8	1	7	9	54	2*	3	39	10	-6*	-17	53	31	12*
7	126	7	7	1	92	11	11	8	78	28	-26*	4	780	11	-2	-16	253	6	3
8	203	10	5	2	42	52	-6*	H ₂ K=	3,	11	5	80	7	6	-15	47	53	-12*	
9	164	9	-4	3	114	9	8	-6	34	54	-9*	6	286	5	1	-14	189	18	-2
10	114	10	-3	4	184	7	5	-5	69	25	41*	7	103	6	-3	-13	50	20	4*
11	110	10	27	5	130	16	-14	-4	111	14	12	8	551	9	4	-12	367	7	-1
12	26	49	-37*	6	78	16	34*	-3	56	39	16*	9	20	43	11*	-11	182	8	6
13	146	10	-2	7	30	54	4*	-2	124	13	13	10	71	11	4	-18	311	7	2
14	110	13	16	8	156	8	5	-1	26	80	19*	11	28	51	-11*	-9	41	18	-2*
15	68	32	-19*	9	126	10	0	0	65	77	7*	12	344	8	2	-8	323	6	8
	H ₂ K=	3,	7	10	110	19	-5	1	50	54	1*	13	65	16	35*	-7	218	5	-3
-15	69	26	60*	11	39	54	-2*	2	137	17	-5	14	186	7	11	-6	610	11	-14
-14	103	13	21	12	90	26	28*	3	42	55	2*	15	24	58	12*	-5	338	7	-3
-13	151	9	18	H ₂ K=	3,	9	4	4	63	45	53*	16	99	15	-10	-4	38	11	-1*

STRUCTURE FACTORS CONTINUED FOR
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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-3	270	5	10	16	142	17	-1	2	263	7	-4	-3	189	6	8	5	110	14	-4
-2	558	10	-6		H _o K _o	4,	5	3	29	42	19*	-2	21	43	2*	6	10	67	-69*
-1	136	4	-3	-18	68	28	2*	4	151	6	7	-1	66	17	4*	7	64	38	-4*
0	280	5	-5	-17	86	19	22*	5	182	6	5	0	96	11	-15	8	63	56	56*
1	47	9	28	-16	176	11	3	6	331	7	-11	1	242	9	-3		H _o K _o	4,	11
2	319	5	4	-15	76	17	-14*	7	92	10	-8	2	162	7	-5	-6	67	29	17*
3	299	5	4	-14	67	20	-7*	8	0	51	-3*	3	30	44	5*	-5	94	10	13*
4	432	7	-6	-13	26	46	15*	9	153	7	-4	4	110	10	6	-4	42	54	36*
5	58	10	0	-12	261	7	4	10	169	9	-13	5	138	8	3	-3	95	18	2*
6	250	5	-1	-11	185	9	-5	11	113	10	9	6	164	11	-3	-2	44	63	-11*
7	145	6	-2	-10	183	6	1	12	100	18	-4	7	114	10	16	-1	114	27	-10*
8	429	8	-3	-9	0	42	-11*	13	45	54	5*	8	36	47	7*	0	43	61	18*
9	102	9	4	-8	173	5	-5	14	115	14	13	9	134	13	4	1	67	26	48*
10	148	7	-3	-7	257	5	-2		H _o K _o	4,	7	10	93	18	-29*	2	55	46	23*
11	0	45	-40*	-6	390	9	-6	-16	123	22	7	11	95	38	-11*	3	133	12	4
12	306	6	5	-5	121	10	3	-15	135	11	29	12	79	21	9*	4	57	56	4*
13	133	9	10	-4	42	16	-14*	-14	42	51	3*		H _o K _o	4,	9		H _o K _o	5,	0
14	178	13	1	-3	174	5	-3	-13	35	53	-24*	-12	58	36	-14*	-19	74	35	32*
15	0	49	-8*	-2	489	11	-2	-12	140	9	2	-11	154	11	21	-17	221	7	0
16	125	12	26	-1	316	8	3	-11	165	11	11	-10	85	20	24*	-15	109	9	-8
17	70	70	5*	0	74	8	-13	-10	120	9	-2	-9	33	51	13*	-13	336	6	3
	H _o K _o	4,	4	1	129	5	-3	-9	25	43	-5*	-8	64	22	10*	-11	244	6	1
-18	168	10	2	2	284	8	-3	-8	97	10	3	-7	200	7	7	-9	339	7	2
-17	0	58	-75*	3	258	10	-2	-7	194	6	-1	-6	109	12	-10	-7	747	13	6
-16	0	59	-12*	4	339	8	2	-6	225	6	-5	-5	117	12	31	-5	104	4	4
-15	69	24	14*	5	74	13	-19	-5	183	7	1	-4	0	61	-13*	-3	653	10	-7
-14	244	6	-2	6	146	9	-8	-4	56	17	-5*	-3	99	24	11*	-1	609	10	0
-13	154	7	4	7	150	6	1	-3	146	7	4	-2	133	13	3	1	693	11	3
-12	178	10	4	8	305	7	5	-2	291	6	3	-1	205	9	-3	3	557	9	8
-11	5	48	-35*	9	134	10	-9	-1	226	8	0	0	76	16	23*	5	354	6	-2
-10	299	6	-6	10	120	9	10	0	78	12	6	1	60	29	21*	7	570	9	1
-9	233	5	1	11	83	12	23	1	46	56	37*	2	104	17	3	9	184	11	-1
-8	331	7	7	12	173	9	4	2	182	6	-7	3	165	8	-2	11	314	7	-6
-7	41	16	-12*	13	110	13	-12	3	258	6	-13	4	64	22	-28*	13	229	6	6
-6	155	4	6	14	125	13	-3	4	213	6	4	5	40	69	-22*	15	86	26	20*
-5	173	9	-3	15	47	53	30*	5	61	35	-3*	6	0	50	-19*	17	152	12	-7
-4	587	13	5		H _o K _o	4,	6	6	11	47	-46*	7	112	13	-15		H _o K _o	5,	1
-3	221	6	-3	-17	93	35	8*	7	186	6	3	8	116	18	21	-19	184	9	-4
-2	154	4	-3	-16	22	69	16*	8	171	8	-10	9	114	18	16	-18	0	53	-8*
-1	205	5	-5	-15	90	21	10*	9	106	14	-5	10	67	26	36*	-17	23	47	15*
0	403	9	-18	-14	164	8	-3	10	81	15	9*		H _o K _o	4,	10	-16	67	29	2*
1	186	6	-14	-13	112	21	-6*	11	88	19	6*	-10	39	63	-11*	-15	333	7	3
2	298	8	3	-12	109	13	5	12	122	13	20	-9	144	11	3	-14	53	18	3*
3	0	31	-8*	-11	15	42	-6*	13	111	18	11	-8	21	60	-37*	-13	178	6	-9
4	319	6	0	-10	154	7	-3		H _o K _o	4,	8	-7	0	60	-37*	-12	47	24	2*
5	254	6	-8	-9	162	6	5	-14	115	14	3	-6	0	65	-16*	-11	330	6	8
6	405	8	0	-8	192	6	6	-13	129	11	6	-5	157	10	14	-18	0	33	-10*
7	99	7	14	-7	64	13	-14*	-12	0	52	-79*	-4	64	67	-13*	-9	537	10	-2
8	29	48	7*	-6	126	9	-3	-11	23	59	6*	-3	111	15	-12	-8	107	5	5
9	96	9	-3	-5	214	6	-5	-10	132	10	-4	-2	45	49	22*	-7	114	4	-2
10	294	7	-2	-4	332	8	2	-9	173	13	-2	-1	66	41	12*	-6	81	5	8
11	160	12	4	-3	254	6	-3	-8	95	14	-5	0	77	17	13*	-5	807	14	1
12	137	9	5	-2	50	15	-2*	-7	79	13	17	1	182	12	4	-4	161	3	7
13	0	48	-20*	-1	136	6	-6	-6	82	27	11*	2	66	23	-3*	-3	77	4	-3
14	148	9	4	0	308	9	-5	-5	205	6	-1	3	42	53	23*	-2	78	4	6
15	104	18	29	1	319	9	-3	-4	137	10	5	4	70	36	17*	-1	849	14	10

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
0	238	4	11	H ₂ K=	5,	3	0	29	36	-17*	-14	54	28	13*	10	95	16	-15	
1	574	9	-8	-19	177	9	10	1	372	9	-13	-13	183	7	6	11	59	29	-22*
2	78	5	9	-18	48	53	-3*	2	115	5	-11	-12	182	7	3	12	28	57	-15*
3	608	10	15	-17	47	37	40*	3	606	13	2	-11	197	6	9	13	78	22	1*
4	250	5	-6	-16	95	20	-1*	4	136	5	-11	-10	0	42	-32*	H ₂ K=	5,	8	
5	503	8	5	-15	283	6	-7	5	153	6	-8	-9	155	6	4	-14	51	53	12*
6	71	19	2*	-14	111	12	4	6	97	7	-7	-8	171	7	1	-13	130	11	10
7	97	6	19	-13	190	6	-11	7	377	7	-5	-7	280	9	-8	-12	175	14	3
8	36	41	-13*	-12	59	14	22*	8	98	18	-3	-6	153	6	-5	-11	104	13	3
9	428	8	4	-11	302	8	-2	9	83	11	-16	-5	26	42	-18*	-10	46	47	-12*
10	40	44	19*	-10	194	5	-5	10	83	12	-3	-4	155	8	0	-9	94	12	10
11	229	6	0	-9	459	8	0	11	228	8	0	-3	375	11	1	-8	164	8	2
12	44	36	8*	-8	43	21	-11*	12	115	12	0	-2	286	9	-7	-7	216	6	4
13	171	7	2	-7	152	5	-6	13	129	11	-11	-1	123	6	13	-6	118	11	-5
14	18	46	-12*	-6	97	5	5	14	0	51	-7*	0	31	37	15*	-5	45	29	24*
15	164	9	-12	-5	605	12	-1	15	97	16	7	1	247	6	1	-4	177	6	14
16	0	52	-14*	-4	140	4	2	16	115	13	45	2	299	7	-5	-3	220	6	8
17	72	25	31*	-3	137	4	9	H ₂ K=	5,	5	3	350	7	2	-2	182	13	3	
H ₂ K=	5,	2	-2	59	6	9	-18	43	55	-29*	4	56	16	3*	-1	40	43	-7*	
-19	45	66	-12*	-1	572	12	-16	-17	20	57	-5*	5	92	9	17	0	57	20	10*
-18	0	50	-38*	0	230	4	-7	-16	11	50	-42*	6	157	6	2	1	83	13	-14
-17	256	7	12	1	417	9	-1	-15	177	8	-16	7	234	6	2	2	214	6	-5
-16	50	28	19*	2	29	21	25*	-14	138	8	8	8	119	11	5	3	144	9	9
-15	79	14	-10	3	199	5	6	-13	107	12	4	9	115	13	2	4	41	46	-13*
-14	26	41	11*	4	158	5	0	-12	15	43	8*	10	106	10	14	5	0	49	-25*
-13	391	7	-2	5	429	7	-7	-11	219	7	1	11	163	8	9	6	125	9	13
-12	107	8	-7	6	129	9	0	-10	192	5	-4	12	101	14	-13	7	127	10	-8
-11	240	5	-3	7	0	36	-2*	-9	228	6	7	13	103	15	0	8	112	14	-7
-10	30	33	19*	8	97	11	-5	-8	83	9	-8	14	0	58	-6*	9	33	48	-10*
-9	299	5	0	9	367	8	0	-7	96	8	2	H ₂ K=	5,	7	10	84	19	17*	
-8	192	5	-3	10	37	50	4*	-6	302	6	-2	-16	62	33	-3*	11	105	14	23
-7	520	10	-2	11	149	9	-23	-5	382	7	4	-15	130	12	-2	H ₂ K=	5,	9	
-6	32	15	7*	12	31	47	2*	-4	234	9	-2	-14	148	19	22	-12	0	55	-5*
-5	57	6	6	13	189	7	13	-3	100	7	-3	-13	13	51	-39*	-11	90	18	0*
-4	21	25	-5*	14	105	12	21	-2	139	6	1	-12	30	46	13*	-10	142	10	7
-3	516	10	-18	15	167	10	-8	-1	447	11	-4	-11	182	7	7	-9	92	14	4
-2	330	7	-6	16	31	70	18*	0	250	7	-2	-10	203	6	-2	-8	87	14	9
-1	364	7	11	H ₂ K=	5,	4	1	450	11	-15	-9	134	8	7	-7	0	47	-12*	
0	22	27	-5*	-18	62	62	13*	2	53	12	28*	-8	68	15	-3*	-6	158	11	2
1	502	9	2	-17	211	12	8	3	184	5	5	-7	54	27	-11*	-5	136	13	-3
2	28	34	-12*	-16	92	16	3	4	250	7	-3	-6	191	6	5	-4	134	9	-5
3	497	8	10	-15	54	24	12*	5	367	8	-13	-5	231	8	-4	-3	51	36	23*
4	98	7	-2	-14	54	22	2*	6	71	19	-25*	-4	192	6	-16	-2	95	14	-1
5	158	4	1	-13	298	6	4	7	32	39	25*	-3	62	14	12*	-1	101	11	3
6	57	15	-9*	-12	133	7	-11	8	116	8	-10	-2	54	17	-1*	0	175	8	2
7	488	8	3	-11	239	6	-5	9	250	6	-4	-1	195	6	-11	1	103	18	2
8	16	36	-7*	-10	61	21	2*	10	83	22	-5*	0	274	6	-5	2	0	59	-31*
9	151	5	9	-9	140	6	-1	11	113	11	-3	1	226	6	-5	3	51	34	-5*
10	84	10	-3	-8	204	6	1	12	39	51	11*	2	11	42	-1*	4	167	9	0
11	327	6	-5	-7	386	8	-2	13	135	10	5	3	78	12	-3	5	103	22	-5*
12	76	18	-3*	-6	39	17	-4*	14	101	19	2*	4	178	6	-7	6	103	13	11
13	183	8	-4	-5	62	8	14	15	115	15	-1	5	230	8	9	7	7	53	2*
14	19	47	2*	-4	140	4	-9	H ₂ K=	5,	6	6	103	10	7	8	79	29	-4*	
15	72	30	-8*	-3	568	13	-5	-17	122	20	0	7	23	46	-1*	9	106	17	26
16	82	26	32*	-2	343	9	0	-16	84	20	-12*	8	127	9	2	H ₂ K=	5,	10	
17	170	12	12	-1	180	4	-5	-15	0	58	-24*	9	172	10	6	-10	41	55	12*

STRUCTURE FACTORS CONTINUED FOR
URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
-9	24	59	-14*	-11	26	35	4*	8	343	6	6	-9	71	16	-23*	12	139	9	18
-8	131	17	17	-10	273	6	-1	9	48	32	1*	-8	172	5	-3	13	56	57	54*
-7	90	31	2*	-9	88	6	6	10	193	6	-5	-7	167	5	3	14	44	60	-32*
-6	92	17	1*	-8	531	10	-6	11	26	50	19*	-6	464	9	-14	H ₂ K=	6,	6	
-5	0	54	-9*	-7	19	28	10*	12	217	7	0	-5	138	6	-1	-17	0	56	-59*
-4	117	14	1	-6	78	6	7	13	88	16	21	-4	208	4	0	-16	141	14	-7
-3	58	36	-13*	-5	170	4	15	14	173	8	8	-3	236	6	3	-15	110	21	-3*
-2	132	12	-16	-4	602	11	-8	15	30	63	21*	-2	368	8	-5	-14	74	17	7*
-1	38	50	-22*	-3	206	5	11	16	7	61	-53*	-1	258	6	-5	-13	13	52	1*
0	33	60	-7*	-2	190	4	-1	H ₂ K=	6,	3	0	322	7	-6	-12	135	9	-5	
1	62	25	1*	-1	121	3	6	-19	51	55	12*	1	50	15	36*	-11	183	7	10
2	165	9	3	0	355	6	2	-18	191	10	3	2	309	7	-6	-16	200	7	-7
3	47	53	-21*	1	157	4	6	-17	79	17	9*	3	181	5	-6	-9	90	10	-5
4	60	62	5*	2	774	13	15	-16	87	20	6*	4	396	7	4	-8	98	20	4*
5	54	43	30*	3	38	14	-4*	-15	29	43	7*	5	89	15	10	-7	141	6	11
6	115	14	8	4	105	5	-9	-14	301	7	12	6	40	24	28*	-6	328	7	2
7	0	65	-55*	5	85	7	-2	-13	79	12	-3	7	74	13	7	-5	165	6	7
H ₂ K=	5,	11	6	495	9	-6	-12	288	7	3	8	324	6	-4	-4	70	14	-4*	
-5	78	21	32*	7	38	23	13*	-11	27	41	-2*	9	131	8	-5	-3	86	10	4
-4	115	14	10	8	149	6	-13	-10	221	6	-3	10	130	10	-9	-2	357	7	-8
-3	0	60	-8*	9	92	11	-4	-9	175	5	6	11	0	45	-8*	-1	264	7	-10
-2	58	44	0*	10	315	6	1	-8	542	11	-5	12	136	9	-12	0	166	7	9
-1	63	63	20*	11	25	46	3*	-7	117	6	14	13	121	13	7	1	30	39	11*
0	145	12	12	12	137	9	-6	-6	30	32	-3*	14	145	18	-3	2	179	5	2
1	71	33	31*	13	0	53	-16*	-5	132	4	6	15	0	57	-6*	3	235	9	8
2	39	56	32*	14	88	30	1*	-4	555	10	-1	H ₂ K=	6,	5	4	324	7	1	
3	78	22	46*	15	59	28	45*	-3	193	5	8	-18	155	23	2	5	108	11	-9
H ₂ K=	6,	0	16	181	9	10	-2	229	5	-3	-17	94	28	8*	6	37	49	22*	
-20	163	14	-1	H ₂ K=	6,	2	-1	120	5	9	-16	16	49	-21*	7	137	8	-5	
-18	32	53	27*	-19	39	59	20*	0	426	9	-5	-15	0	52	-28*	8	194	7	0
-16	303	6	10	-18	46	53	43*	1	62	8	-4	-14	196	7	6	9	136	11	1
-14	202	6	-5	-17	42	47	32*	2	509	9	11	-13	140	8	4	10	94	13	-1
-12	322	6	-5	-16	283	6	7	3	43	14	9*	-12	173	8	3	11	48	39	13*
-10	262	7	-5	-15	58	47	4*	4	178	5	4	-11	17	42	-3*	12	84	17	8*
-8	95	7	-7	-14	193	6	-8	5	177	5	-5	-10	78	18	-10*	13	89	19	-12*
-6	677	12	9	-13	56	16	-4*	6	364	7	-8	-9	153	6	-15	H ₂ K=	6,	7	
-4	26	23	2*	-12	311	8	3	7	70	11	-8	-8	337	6	2	-15	12	54	-44*
-2	359	6	-8	-11	105	7	-8	8	126	7	-2	-7	49	32	-1*	-14	126	12	-8
0	847	14	24	-10	395	7	-6	9	83	12	-24	-6	35	27	29*	-13	167	9	11
2	575	10	4	-9	91	11	1	10	256	7	4	-5	102	7	2	-12	122	14	10
4	737	12	3	-8	158	4	-4	11	66	18	-7*	-4	425	9	-5	-11	16	52	-6*
6	193	5	14	-7	69	15	-24*	12	158	8	1	-3	215	5	-1	-10	87	36	-8*
8	384	7	-2	-6	731	15	-14	13	57	25	23*	-2	156	5	-2	-9	136	10	2
10	178	7	-3	-5	217	6	-3	14	105	14	6	-1	34	35	-12*	-8	199	7	5
12	228	6	4	-4	123	4	1	15	29	74	-23*	0	482	9	-14	-7	181	9	-7
14	132	11	-13	-3	128	4	6	16	155	11	5	1	223	5	0	-6	41	50	14*
16	0	66	-59*	-2	458	8	2	H ₂ K=	6,	4	2	382	8	-1	-5	169	8	-3	
H ₂ K=	6,	1	-1	123	4	1	-18	11	68	-3*	3	96	8	-1	-4	229	7	-2	
-19	55	56	20*	0	447	8	4	-17	54	64	31*	4	95	11	-1	-3	163	6	-4
-18	238	7	8	1	37	12	1*	-16	225	7	7	5	187	7	-2	-2	113	8	6
-17	0	48	-10*	2	377	6	-1	-15	80	15	-18*	6	335	8	-5	-1	46	24	13*
-16	53	26	-5*	3	78	7	1	-14	101	10	-5	7	156	6	1	0	231	6	-10
-15	35	46	-4*	4	601	10	-12	-13	49	25	-27*	8	93	10	0	1	215	8	0
-14	339	6	-6	5	40	18	0*	-12	221	6	-7	9	72	15	1*	2	229	6	6
-13	28	43	7*	6	44	16	18*	-11	194	5	7	10	152	8	-12	3	62	20	-13*
-12	212	10	-6	7	74	19	2*	-10	320	7	0	11	113	10	8	4	57	19	4*

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL		
5	178	7	0	8	35	55	-6*	-9	59	13	-2*	10	55	19	18*	-5	479	10	-4		
6	203	9	-1	9	15	64	-32*	-8	109	5	-2	11	180	7	-2	-4	165	7	5		
7	122	10	-17	H ₂ K ₂ 6,				10	-7	567	11	-4	12	9	49	0*	-3	150	5	-3	
8	81	20	2*	-9	49	59	-3*	-6	26	31	-14*	13	93	24	-12*	-2	29	32	14*		
9	70	20	-3*	-8	10	54	-6*	-5	24	28	3*	14	81	19	31*	-1	296	6	-1		
10	118	11	12	-7	122	13	7	-4	39	12	20*	15	169	10	0	0	140	7	3		
11	118	12	9	-6	103	16	7	-3	774	13	12	H ₂ K ₂ 7,				3	1	418	7	-6	
12	112	14	19	-5	120	12	6	-2	68	6	-4	-19	78	19	69*	2	100	7	-7		
H ₂ K ₂ 6,				8	-4	46	67	33*	-1	707	12	22	-18	13	63	-18*	3	104	7	-2	
-14	45	58	4*	-3	75	19	15*	0	36	13	-10*	-17	224	7	-3	4	167	5	3		
-13	38	56	15*	-2	70	21	11*	1	344	6	7	-16	110	12	14	5	344	6	-10		
-12	101	18	1	-1	147	15	-15	2	37	23	24*	-15	85	15	-7	6	148	6	2		
-11	174	9	-5	0	73	20	7*	3	596	9	-8	-14	13	43	-8*	7	83	11	6		
-10	108	22	-12*	1	43	61	28*	4	68	9	-1	-13	270	7	5	8	118	8	2		
-9	80	18	-8*	2	26	53	4*	5	41	21	2*	-12	117	7	5	9	234	6	-5		
-8	65	30	13*	3	119	16	-15	6	39	22	22*	-11	327	7	-11	10	98	15	-5		
-7	157	9	4	4	126	13	50	7	393	7	-1	-10	69	11	-13	11	149	8	3		
-6	192	11	3	5	77	32	6*	8	22	39	-11*	-9	28	36	-19*	12	57	25	35*		
-5	166	9	-1	6	46	54	41*	9	206	6	2	-8	184	5	-9	13	101	20	1*		
-4	0	44	-9*	H ₂ K ₂ 6,				11	10	0	44	-39*	-7	479	11	-4	14	62	34	-13*	
-3	71	15	0*	-4	23	56	-36*	11	263	7	1	-6	98	6	-11	H ₂ K ₂ 7,					
-2	136	9	-5	-3	132	14	6	12	55	25	11*	-5	94	6	1	-18	17	55	-19*		
-1	216	6	0	-2	34	59	7*	13	159	9	-11	-4	30	29	-13*	-17	143	22	-18		
0	129	8	2	-1	61	33	38*	14	6	49	-6*	-3	524	11	-4	-16	114	12	5		
1	43	37	32*	0	51	57	33*	15	37	55	-10*	-2	221	6	0	-15	55	28	-10*		
2	112	10	1	1	82	26	-48*	16	55	41	28*	-1	399	8	6	-14	0	56	-2*		
3	163	13	-13	H ₂ K ₂ 7,				0	H ₂ K ₂ 7,				2	0	19	30	2*	-13	212	11	-2
4	111	11	-12	-19	199	13	2	-19	189	13	8	1	277	6	-6	-12	129	8	4		
5	105	11	21	-17	76	16	17*	-18	47	49	11*	2	44	14	5*	-11	269	6	-5		
6	49	33	13*	-15	242	7	5	-17	64	30	10*	3	425	7	-5	-10	108	8	8		
7	120	11	-1	-13	251	6	8	-16	48	36	-23*	4	207	5	1	-9	127	7	-8		
8	136	9	24	-11	196	5	3	-15	261	6	-1	5	43	22	18*	-8	169	8	-8		
9	120	12	6	-9	506	9	4	-14	65	14	3*	6	26	48	-23*	-7	315	6	-6		
10	71	24	6*	-7	86	6	3	-13	262	6	4	7	358	6	-4	-6	265	6	-4		
11	67	44	32*	-5	896	16	-3	-12	26	39	10*	8	124	8	-17	-5	62	23	-3*		
H ₂ K ₂ 6,				9	-3	377	7	-1	-11	194	5	0	9	142	10	-7	-4	116	6	-10	
-12	94	19	50*	-1	610	11	10	-10	165	5	-3	10	28	49	-4*	-3	314	7	2		
-11	66	25	46*	1	647	11	24	-9	529	11	0	11	187	8	4	-2	243	7	-1		
-10	93	16	16	3	275	5	1	-8	73	8	3	12	113	11	-5	-1	281	6	-10		
-9	166	9	3	5	541	9	6	-7	177	4	4	13	164	11	-4	0	43	20	3*		
-8	98	13	-3	7	17	37	-15*	-6	113	4	0	14	36	59	30*	1	258	6	-6		
-7	101	14	5	9	319	8	-4	-5	604	12	-5	15	71	25	18*	2	155	6	-2		
-6	27	48	22*	11	204	7	-8	-4	200	5	-11	H ₂ K ₂ 7,				4	3	312	7	-9	
-5	101	12	1	13	82	17	-16*	-3	273	5	-5	-18	85	18	11*	4	123	7	14		
-4	91	14	-11	15	143	12	-9	-2	79	5	9	-17	27	51	-16*	5	53	30	28*		
-3	169	8	-10	H ₂ K ₂ 7,				1	-1	384	7	-2	-16	38	57	-7*	6	123	8	-16	
-2	100	12	12	-19	26	50	19*	0	136	4	-4	-15	257	6	3	7	292	6	3		
-1	0	48	-43*	-18	9	49	1*	1	529	9	9	-14	123	8	5	8	145	8	-6		
0	54	31	-28*	-17	227	7	2	2	52	11	16*	-13	194	6	9	9	114	10	8		
1	179	8	11	-16	60	20	-3*	3	147	4	9	-12	37	40	7*	10	0	47	-30*		
2	110	11	7	-15	179	9	13	4	129	5	4	-11	168	7	-14	11	117	11	6		
3	55	28	5*	-14	0	41	-2*	5	420	7	2	-10	231	5	0	12	130	15	19		
4	22	60	-12*	-13	252	5	3	6	53	15	-11*	-9	361	7	8	13	118	13	-1		
5	127	11	4	-12	81	9	11	7	110	7	-16	-8	100	7	10	14	20	55	-1*		
6	78	27	-11*	-11	304	6	4	8	96	9	-11	-7	57	12	0*	H ₂ K ₂ 7,					
7	101	21	-8*	-10	63	10	1	9	339	7	0	-6	141	8	18	-17	57	38	40*		

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-16	27	53	-13*	10	22	66	-14*	-5	18	57	-51*	7	58	15	-8*	-9	104	8	-4
-15	159	9	-2	11	71	28	-3*	-4	148	15	19	8	357	7	1	-8	39	22	-14*
-14	165	10	14	12	112	15	9	-3	23	73	-30*	9	8	51	-19*	-7	152	5	-3
-13	83	15	0		H ₀ K=	7,	8	-2	58	33	-1*	10	190	6	8	-6	536	11	-2
-12	42	44	28*	-14	143	12	11	-1	66	28	7*	11	40	45	31*	-5	164	4	-3
-11	115	10	-5	-13	60	46	2*	0	138	14	-6	12	164	8	2	-4	339	8	9
-10	168	7	-1	-12	0	69	-23*	1	47	55	-29*	13	39	52	17*	-3	130	6	8
-9	216	6	8	-11	81	18	-1*	2	43	54	-1*	14	178	12	5	-2	371	7	4
-8	147	7	-1	-10	124	11	-14	3	25	62	6*	15	0	55	-3*	-1	277	7	-3
-7	42	29	3*	-9	129	11	-14	4	123	13	8		H ₀ K=	8,	2	0	430	8	-8
-6	123	7	-1	-8	146	11	10	5	30	64	-21*	-19	20	56	-17*	1	94	8	0
-5	262	6	3	-7	17	51	12*		H ₀ K=	8,	0	-18	198	8	-13	2	198	6	-2
-4	206	7	5	-6	119	14	5	-18	241	7	5	-17	61	23	18*	3	151	5	-1
-3	197	5	-11	-5	188	8	-10	-16	107	19	1	-16	135	12	-3	4	338	6	0
-2	37	44	27*	-4	163	8	1	-14	225	6	2	-15	40	57	4*	5	106	8	-17
-1	239	5	-4	-3	62	33	-16*	-12	230	6	1	-14	265	6	3	6	88	9	7
0	246	7	-10	-2	17	44	-28*	-10	131	6	12	-13	44	26	6*	7	90	10	3
1	301	9	3	-1	113	11	2	-8	666	14	-9	-12	297	6	-2	8	309	6	1
2	57	16	-9*	0	208	6	1	-6	34	17	13*	-11	36	42	-23*	9	79	13	6
3	97	10	-14	1	121	9	-9	-4	639	12	17	-10	201	5	-7	10	144	16	-12
4	196	6	-6	2	62	25	9*	-2	615	11	20	-9	54	14	11*	11	29	53	14*
5	215	8	5	3	40	48	14*	0	348	6	8	-8	644	13	-5	12	136	17	1
6	110	14	5	4	154	11	0	2	583	10	5	-7	163	5	-5	13	36	55	-30*
7	91	12	0	5	139	10	15	4	53	12	11*	-6	93	6	2	14	173	10	7
8	92	13	-17	6	100	13	-2	6	385	7	-3	-5	74	7	-14		H ₀ K=	8,	4
9	202	8	23	7	35	61	6*	8	164	6	-5	-4	654	13	3	-18	149	11	-19
10	120	11	-1	8	51	52	-7*	10	283	7	-15	-3	223	4	9	-17	110	13	14
11	99	14	0	9	74	23	-11*	12	200	8	-2	-2	357	7	7	-16	57	59	-18*
12	59	30	47*	10	116	19	2	14	67	39	14*	-1	101	5	4	-15	0	47	-5*
13	51	55	-3*		H ₀ K=	7,	9		H ₀ K=	8,	1	0	244	5	8	-14	181	7	0
	H ₀ K=	7,	7	-12	122	14	-9	-19	27	52	5*	1	169	5	1	-13	97	11	-7
-15	39	55	-9*	-11	79	21	14*	-18	67	27	8*	2	429	8	-3	-12	250	6	-8
-14	13	51	10*	-10	18	55	-31*	-17	0	69	-21*	3	30	35	-11*	-11	69	26	4*
-13	141	10	0	-9	50	51	19*	-16	272	6	6	4	37	40	4*	-10	138	7	-12
-12	183	8	0	-8	133	12	15	-15	61	17	30*	5	53	35	-8*	-9	123	7	-1
-11	145	15	-14	-7	136	10	2	-14	242	6	-3	6	315	6	1	-8	452	10	3
-10	87	12	20	-6	147	9	4	-13	29	44	10*	7	61	21	-7*	-7	124	6	-2
-9	110	11	8	-5	0	51	-5*	-12	332	8	5	8	162	6	5	-6	110	6	2
-8	143	7	8	-4	111	11	21	-11	65	11	4	9	73	18	-2*	-5	168	5	-2
-7	250	6	10	-3	112	15	13	-10	467	9	-2	10	235	7	-13	-4	319	7	7
-6	210	7	0	-2	148	15	8	-9	28	37	-2*	11	65	18	19*	-3	233	8	-4
-5	50	20	36*	-1	88	15	-11	-8	20	48	2*	12	212	8	0	-2	407	9	-8
-4	53	18	9*	0	0	48	-5*	-7	33	20	5*	13	46	49	31*	-1	46	15	-25*
-3	172	6	6	1	46	48	2*	-6	620	12	5	14	77	21	23*	0	300	7	8
-2	221	6	3	2	174	11	1	-5	114	9	-5	15	13	55	-30*	1	246	5	-6
-1	163	8	2	3	96	23	-9*	-4	264	6	0		H ₀ K=	8,	3	2	331	6	-7
0	0	42	-14*	4	89	17	20*	-3	66	8	1	-19	24	54	-33*	3	71	10	-7
1	114	8	9	5	33	58	25*	-2	457	9	-20	-18	44	61	5*	4	35	38	31*
2	199	6	-4	6	56	56	-40*	-1	124	6	2	-17	37	60	28*	5	71	14	-1*
3	188	8	12	7	0	56	-63*	0	628	11	9	-16	216	7	-1	6	347	7	-1
4	66	41	1*	8	117	20	6	1	0	38	-19*	-15	120	9	-3	7	151	11	11
5	46	30	39*		H ₀ K=	7,	10	2	275	5	1	-14	167	7	6	8	102	13	-2
6	135	8	0	-9	64	30	5*	3	105	7	4	-13	46	47	2*	9	41	43	20*
7	158	8	-6	-8	54	65	-34*	4	526	9	1	-12	229	6	2	10	174	9	-4
8	137	10	0	-7	82	21	73*	5	30	37	-10*	-11	145	7	0	11	88	15	-7
9	63	38	-16*	-6	124	12	29	6	111	7	-4	-10	447	8	-10	12	169	8	9

STRUCTURE FACTORS CONTINUED FOR
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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	
13	0	65	-25*	5	158	7	1	5	136	18	1	13	161	10	-1	0	0	37	-17*	
14	25	58	-7*	6	242	8	-11	6	122	11	4		H ₀ K ₈	9,	1	1	196	6	2	
	H ₀ K ₈	8,	5	7	150	8	-1	7	105	16	-12	-19	170	10	-28	2	77	16	-19*	
-17	0	56	-27*	8	71	23	-7*	8	83	18	18*	-18	40	55	2*	3	447	7	0	
-16	16	2	11	-2	9	57	59	27*	9	0	55	-25*	-17	116	10	17	4	124	6	-5
-15	14	4	11	19	10	79	19	-17*		H ₀ K ₈	8,	9	-16	66	19	25*	5	73	11	-6
-14	8	8	13	21	11	98	16	-10	-11	139	12	-7	-15	209	6	-5	6	48	21	3*
-13	6	0	20	19*	12	109	17	3	-10	107	15	18	-14	0	48	-46*	7	350	6	2
-12	10	9	11	-1		H ₀ K ₈	8,	7	-9	84	22	7*	-13	300	6	5	8	57	20	13*
-11	15	1	11	6	-15	136	14	-2	-8	0	50	-10*	-12	24	44	17*	9	182	11	7
-10	27	4	9	-7	-14	38	68	-35*	-7	110	12	0	-11	197	6	4	10	47	50	23*
-9	9	9	9	1	-13	36	49	30*	-6	84	17	-23*	-10	66	10	19	11	132	10	11
-8	6	0	14	12*	-12	85	15	2	-5	173	8	5	-9	515	10	-10	12	49	51	4*
-7	9	8	8	-5	-11	158	8	11	-4	66	19	28*	-8	22	34	-6*	13	174	11	-7
-6	32	4	7	0	-10	188	8	-5	-3	35	53	3*	-7	18	41	-1*	14	0	67	-4*
-5	20	5	5	1	-9	130	9	6	-2	80	16	2*	-6	20	34	16*		H ₀ K ₈	9,	3
-4	20	8	7	3	-8	58	20	3*	-1	150	18	8	-5	601	11	11	-19	175	11	4
-3	65	11	5	-7	119	9	-17	0	96	13	4	-4	83	6	4	-18	82	18	4*	
-2	26	9	6	3	-6	203	7	-1	1	52	57	-3*	-3	466	9	18	-17	74	22	-3*
-1	30	5	8	-3	-5	207	8	1	2	0	49	-26*	-2	31	35	9*	-16	15	46	-5*
0	33	9	7	-1	-4	71	20	20*	3	127	11	3	-1	325	6	-2	-15	225	7	-4
1	32	37	10*	-3	56	23	37*	4	102	16	0	0	44	13	-7*	-14	61	62	-24*	
2	10	3	8	-4	-2	180	6	-9	5	68	27	-14*	1	461	7	9	-13	304	6	3
3	23	5	5	0	-1	184	6	-2	6	45	53	1*	2	0	33	-20*	-12	86	10	11
4	32	3	6	3	0	150	8	-3	7	62	32	10*	3	96	7	-1	-11	143	7	6
5	11	3	9	-11	1	71	14	2*		H ₀ K ₈	8,	10	4	46	16	29*	-10	142	6	1
6	8	8	10	15	2	58	19	-1*	-8	38	60	-30*	5	404	7	3	-9	494	9	-3
7	9	1	20	17*	3	182	7	6	-7	110	16	4	6	9	39	-3*	-8	66	11	-3
8	22	0	7	5	4	194	6	5	-6	0	53	-4*	7	176	6	-15	-7	25	39	-23*
9	13	9	10	-3	5	79	20	-20*	-5	62	29	13*	8	0	47	-31*	-6	103	7	5
10	10	9	12	-6	6	84	15	1	-4	32	67	-39*	9	234	6	9	-5	406	7	-5
11	15	62	1*	7	102	12	8	-3	150	14	3	10	29	58	8*	-4	148	5	-9	
12	6	7	39	-6*	8	100	14	-7	-2	64	27	15*	11	214	7	-3	-3	347	8	-2
13	8	0	27	1*	9	118	13	-10	-1	41	51	33*	12	26	51	19*	-2	0	37	-23*
	H ₀ K ₈	8,	6	10	72	73	-24*	0	0	74	-24*	13	61	30	3*	-1	225	6	2	
-16	7	0	22	24*	11	43	53	31*	1	134	12	0	14	72	39	46*	0	190	5	4
-15	0	51	-26*		H ₀ K ₈	8,	8	2	75	45	-7*		H ₀ K ₈	9,	2	1	395	8	-1	
-14	13	3	12	2	-14	90	20	3*	3	99	24	37*	-19	48	53	24*	2	27	36	0*
-13	14	3	10	-13	-13	158	11	-2	4	67	36	11*	-18	36	56	11*	3	36	41	22*
-12	15	2	8	7	-12	77	22	-8*		H ₀ K ₈	9,	0	-17	247	7	8	4	42	44	-4*
-11	4	9	49	-22*	-11	57	67	9*	-19	0	53	-27*	-16	130	9	13	5	364	7	-10
-10	7	3	15	-6*	-10	51	43	-9*	-17	246	7	-5	-15	182	7	5	6	0	42	-45*
-9	13	4	7	4	-9	144	9	2	-15	210	7	-13	-14	45	28	27*	7	152	7	-4
-8	24	7	6	1	-8	143	10	1	-13	236	6	0	-13	162	6	0	8	43	43	19*
-7	17	6	6	7	-7	183	7	15	-11	280	6	6	-12	132	7	-1	9	175	8	-5
-6	4	9	20	-9*	-6	19	48	10*	-9	72	9	7	-11	388	8	-13	10	95	13	-1
-5	7	6	11	-4	-5	56	27	-11*	-7	442	9	13	-10	62	22	12*	11	193	10	9
-4	24	0	5	-9	-4	103	11	-3	-5	372	8	2	-9	6	36	-29*	12	38	53	15*
-3	17	4	8	-4	-3	170	7	1	-3	622	11	17	-8	0	35	-21*	13	46	67	-12*
-2	17	7	7	-5	-2	154	9	2	-1	600	11	0	-7	500	10	0	14	66	33	10*
-1	24	49	13*	-1	49	27	46*	1	153	5	-9	-6	38	17	20*		H ₀ K ₈	9,	4	
0	19	1	8	7	0	143	12	8	3	663	11	0	-5	332	7	-3	-18	37	64	25*
1	19	1	7	-9	1	130	14	-13	5	39	47	21*	-4	19	35	-5*	-17	195	10	-5
2	30	8	6	-4	2	158	7	19	7	367	7	6	-3	478	8	3	-16	128	10	2
3	13	5	10	-4	3	106	14	13	9	218	6	16	-2	150	5	7	-15	144	9	-2
4	37	46	27*	4	0	53	-12*	11	129	18	-9	-1	568	10	9	-14	45	37	-3*	

STRUCTURE FACTORS CONTINUED FOR
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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-13	174	7	-7	11	103	24	-24*	9	69	27	-27*	-18	106	13	9	-16	220	7	-2
-12	101	10	-14	12	0	6E	-33*	10	111	19	-8	-16	255	6	-3	-15	72	16	4*
-11	327	6	-9		H,K#	9,	6		H,K#	9,	8	-14	323	7	-12	-14	310	6	1
-10	118	8	-10	-16	124	14	1	-13	76	49	8*	-12	133	9	9	-13	35	41	18*
-9	52	25	10*	-15	71	31	-24*	-12	130	12	1	-10	517	9	-4	-12	139	7	-3
-8	140	8	9	-14	37	48	15*	-11	130	15	3	-8	104	6	3	-11	33	45	-25*
-7	468	8	-12	-13	98	14	-7	-10	80	27	-12*	-6	251	6	-2	-10	459	8	-3
-6	163	8	1	-12	142	8	1	-9	34	47	19*	-4	317	6	-8	-9	55	23	-19*
-5	175	5	3	-11	235	6	-7	-8	122	18	10	-2	392	7	3	-8	135	7	-2
-4	118	6	3	-10	96	11	-1	-7	184	7	4	0	533	9	4	-7	92	9	7
-3	275	6	-5	-9	80	18	-9*	-6	190	7	3	2	37	24	18*	-6	403	8	-11
-2	217	7	4	-8	135	12	2	-5	41	50	-9*	4	431	7	-12	-5	41	18	-5*
-1	378	8	11	-7	287	6	1	-4	29	46	-4*	6	185	6	2	-4	273	6	-5
0	16	36	-14*	-6	223	7	4	-3	115	9	8	8	268	6	1	-3	147	5	-2
1	106	7	3	-5	112	12	-2	-2	181	10	8	10	217	10	0	-2	319	7	3
2	138	6	-6	-4	41	27	9*	-1	116	11	0	12	72	43	6*	-1	124	9	-4
3	289	6	4	-3	167	6	13	0	66	19	-4*	14	176	11	19	0	428	8	-1
4	136	7	-8	-2	223	8	-7	1	54	55	36*		H,K#	10,	1	1	11	38	-14*
5	73	15	-13*	-1	274	9	-6	2	137	10	-5	-19	65	26	45*	2	58	12	23*
6	84	19	4*	0	71	15	0*	3	122	10	-4	-18	213	9	7	3	50	16	11*
7	289	6	5	1	102	9	7	4	107	11	4	-17	0	48	-9*	4	314	6	2
8	99	12	-7	2	145	8	-8	5	13	50	-20*	-16	180	8	-7	5	100	9	-4
9	148	9	-6	3	162	7	-4	6	70	24	1*	-15	25	55	10*	6	158	10	2
10	0	48	-4*	4	104	10	-8	7	106	15	21	-14	160	7	-2	7	20	55	-26*
11	106	16	5	5	100	16	5	8	133	17	8	-13	31	41	9*	8	239	6	4
12	86	17	8*	6	98	16	-2		H,K#	9,	9	-12	429	7	-13	9	44	46	-20*
13	139	13	-20	7	201	8	-14	-11	74	22	43*	-11	61	14	3*	10	207	10	3
	H,K#	9,	5	8	154	9	18	-10	116	18	12	-10	56	13	0*	11	0	58	-3*
-17	73	31	22*	9	117	12	-3	-9	70	25	-33*	-9	28	37	21*	12	62	37	1*
-16	0	54	-8*	10	39	52	18*	-8	110	14	-14	-8	419	7	3	13	45	59	19*
-15	180	10	-1	11	68	27	2*	-7	76	19	52*	-7	56	16	2*		H,K#	10,	3
-14	127	10	1		H,K#	9,	7	-6	66	24	-26*	-6	214	5	1	-18	192	8	2
-13	194	7	6	-15	90	23	-17*	-5	98	15	1	-5	0	32	-13*	-17	83	21	2*
-12	44	49	0*	-14	151	10	13	-4	163	11	5	-4	347	7	-4	-16	157	15	7
-11	87	20	2*	-13	109	16	0	-3	101	13	16	-3	77	7	10	-15	22	46	0*
-10	129	8	-8	-12	78	26	26*	-2	46	58	40*	-2	407	7	-1	-14	199	9	12
-9	315	6	5	-11	41	46	6*	-1	0	52	-45*	-1	161	5	-11	-13	18	58	-25*
-8	111	8	8	-10	123	10	8	0	169	8	21	0	170	6	1	-12	359	7	-2
-7	80	10	6	-9	225	7	3	1	101	14	1	1	107	11	-14	-11	73	13	11
-6	118	7	0	-8	141	8	-1	2	102	17	11	2	553	9	-10	-18	51	41	7*
-5	267	5	-7	-7	36	44	-7*	3	70	21	88*	3	56	13	9*	-9	0	42	-32*
-4	211	5	-5	-6	56	20	-10*	4	90	19	-8*	4	143	7	-4	-8	424	9	-5
-3	304	8	-4	-5	176	7	-15	5	81	36	-7*	5	44	23	11*	-7	58	13	-8*
-2	22	42	3*	-4	233	6	4	6	109	16	-1	6	318	7	-7	-6	245	5	2
-1	225	6	10	-3	184	6	0		H,K#	9,	10	7	36	55	12*	-5	74	10	4
0	177	6	-8	-2	57	24	18*	-7	82	19	29*	8	177	9	-1	-4	293	6	-4
1	297	6	-3	-1	119	12	1	-6	131	14	5	9	42	45	15*	-3	179	5	1
2	122	8	2	0	197	7	-12	-5	24	56	-11*	10	100	26	-11*	-2	417	8	4
3	41	43	27*	1	182	9	8	-4	62	51	22*	11	44	48	29*	-1	82	14	-10
4	115	9	-12	2	98	14	-14	-3	52	54	-8*	12	209	9	1	0	130	7	-1
5	307	6	0	3	0	54	-9*	-2	157	11	21	13	0	55	-7*	1	135	9	-1
6	88	13	-5	4	133	10	0	-1	71	25	5*	14	54	54	42*	2	334	6	4
7	127	9	-2	5	182	14	0	0	56	61	14*		H,K#	10,	2	3	177	5	-2
8	29	47	-21*	6	72	23	-30*	1	27	55	0*	-19	0	58	-61*	4	111	9	2
9	143	10	-4	7	107	11	21	2	81	25	-37*	-18	75	21	-9*	5	47	50	-4*
10	118	15	5	8	45	52	3*		H,K#	10,	0	-17	0	49	-19*	6	290	6	2

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
7	53	25	-15*	-1	101	8	-5	0	79	15	-13*	0	65	65	-2*	-16	23	53	20*
8	150	10	1	0	110	8	4	1	135	8	4		H ₂ K= 11,	11,	0	-15	125	9	-1
9	0	47	-2*	1	229	6	0	2	162	8	5	-19	196	9	0	-14	72	16	-18*
10	134	11	10	2	293	6	0	3	142	11	-4	-17	180	8	-1	-13	365	7	-6
11	51	56	4*	3	164	7	0	4	43	50	-3*	-15	136	9	-12	-12	51	21	-2*
12	179	10	-3	4	20	50	-42*	5	116	10	22	-13	329	9	2	-11	30	40	2*
13	55	61	20*	5	61	37	6*	6	117	21	-8	-11	80	12	-2	-10	38	38	18*
	H ₂ K= 10,	4	6	239	11	-5	7	130	12	15	-9	292	5	-1	-9	393	8	-6	
-18	36	57	-22*	7	139	15	0	8	103	24	4*	-7	206	5	2	-8	124	9	-3
-17	22	51	9*	8	128	13	7	9	34	60	24*	-5	383	7	-13	-7	185	5	-4
-16	149	14	-5	9	0	54	-9*		H ₂ K= 10,	8	-3	375	6	4	-6	4	35	-22*	
-15	105	12	-2	10	83	20	-17*	-13	55	40	4*	-1	67	10	-24	-5	311	6	-6
-14	199	7	3	11	75	29	-1*	-12	0	59	-42*	1	528	9	9	-4	35	33	-13*
-13	64	17	10*		H ₂ K= 10,	6	-11	123	15	-5	3	143	6	-8	-3	384	6	-6	
-12	71	15	8*	-16	90	19	-35*	-10	149	10	-1	5	354	7	-3	-2	34	38	-3*
-11	102	14	3	-15	135	19	10	-9	108	13	-7	7	209	7	-1	-1	171	5	-7
-10	357	9	-1	-14	124	11	4	-8	48	55	40*	9	160	8	11	0	87	9	-4
-9	33	11	-29	-13	64	21	-1*	-7	98	12	26	11	218	12	3	1	428	8	-8
-8	72	11	8	-12	48	61	-15*	-6	117	14	7	13	42	55	22*	2	64	27	8*
-7	117	8	-5	-11	125	9	10	-5	197	7	0		H ₂ K= 11,	1	3	95	9	-3	
-6	326	6	-8	-10	198	7	0	-4	119	12	0	-19	92	17	15*	4	50	22	15*
-5	146	7	0	-9	132	9	-6	-3	42	59	34*	-10	0	54	-12*	5	303	6	-10
-4	353	8	-4	-8	45	31	12*	-2	96	13	-7	-17	189	8	-3	6	67	16	-5*
-3	57	14	28*	-7	68	17	-11*	-1	145	9	4	-16	62	23	3*	7	178	10	2
-2	276	6	-7	-6	248	6	9	0	132	10	6	-15	240	6	5	8	3	46	-13*
-1	229	5	-2	-5	210	7	-4	1	95	25	-5*	-14	18	51	12*	9	112	13	1
0	410	7	4	-4	154	10	-1	2	46	57	45*	-13	49	25	-16*	10	52	34	5*
1	52	15	28*	-3	45	23	28*	3	99	14	-12	-12	72	17	0*	11	194	9	-5
2	45	21	14*	-2	164	6	6	4	127	11	10	-11	389	7	-2	12	48	54	41*
3	77	11	-4	-1	204	7	2	5	81	20	-20*	-10	47	21	-23*		H ₂ K= 11,	3	
4	267	8	0	0	284	7	-7	6	67	31	6*	-9	108	7	-2	-10	43	59	42*
5	140	8	-7	1	130	8	13	7	55	46	34*	-8	65	11	4	-17	171	12	0
6	87	15	-14	2	50	50	31*		H ₂ K= 10,	9	-7	392	7	6	-16	83	16	-8*	
7	42	51	31*	3	125	13	-21	-10	44	67	23*	-6	6	35	-27*	-15	223	7	2
8	197	7	9	4	225	8	9	-9	89	31	-1*	-5	434	8	-11	-14	54	26	-18*
9	74	20	-25*	5	131	9	1	-8	78	23	-14*	-4	34	47	21*	-13	64	22	-12*
10	139	11	-14	6	80	30	-10*	-7	151	11	-5	-3	316	6	3	-12	134	8	14
11	38	68	23*	7	0	50	-16*	-6	71	22	15*	-2	0	35	-13*	-11	375	7	-5
12	26	54	-21*	8	85	25	-29*	-5	67	22	22*	-1	373	6	-2	-10	233	7	-17
	H ₂ K= 10,	5	9	98	16	-6	-4	31	52	-52*	0	22	35	16*	-9	102	10	7	
-17	112	14	7	10	116	14	4	-3	167	10	3	1	52	17	-3*	-8	71	14	2*
-16	98	14	19		H ₂ K= 10,	7	-2	80	18	-5*	2	39	26	14*	-7	398	8	-8	
-15	44	47	22*	-14	60	66	-25*	-1	63	24	22*	3	491	9	-7	-6	112	8	12
-14	112	19	-5	-13	119	12	-8	0	0	56	-31*	4	83	12	-10	-5	299	6	1
-13	109	10	0	-12	165	8	16	1	136	12	21	5	192	6	5	-4	16	36	-10*
-12	221	8	-7	-11	116	11	10	2	99	16	17	6	31	56	8*	-3	216	5	-11
-11	100	15	0	-10	22	57	0*	3	101	16	25	7	277	6	-1	-2	110	6	6
-10	56	19	30*	-9	103	12	-10	4	51	66	22*	8	38	47	-10*	-1	321	7	1
-9	85	11	0	-8	195	7	0	5	44	60	-6*	9	223	7	13	0	26	37	12*
-8	338	6	8	-7	169	8	-3		H ₂ K= 10,	10	10	53	46	49*	1	48	45	-9*	
-7	108	8	4	-6	97	11	2	-6	71	36	8*	11	78	18	17*	2	130	7	2
-6	154	6	-3	-5	46	31	7*	-5	134	13	0	12	53	60	41*	3	350	6	-6
-5	53	26	-3*	-4	179	7	-3	-4	42	55	-6*	13	166	10	7	4	113	10	-1
-4	224	5	4	-3	166	11	-13	-3	47	53	33*		H ₂ K= 11,	2	5	145	9	4	
-3	188	5	-1	-2	163	8	-2	-2	60	61	38*	-18	69	27	23*	6	26	44	19*
-2	342	8	-1	-1	63	19	-12*	-1	131	12	5	-17	163	9	14	7	193	8	6

STRUCTURE FACTORS CONTINUED FOR
URANYL UREA NITRATE

L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
8	110	14	-21	3	241	6	4	6	51	51	20 ^u -17	40	50	21 ^u	7	50	37	-22 ^u	
9	173	8	-2	4	141	8	-10	7	86	23	2 ^u -16	169	9	7	8	215	7	2	
10	0	55	-6 ^u	5	111	11	-2	8	110	17	7	-15	0	47	-35 ^u	9	0	60	-5 ^u
11	52	29	10 ^u	6	25	51	-14 ^u	H ₀ K ₀	11 ₀	8	-14	292	7	-2	10	0	53	-45 ^u	
12	30	65	-3 ^u	7	158	9	10	-12	63	32	-17 ^u -13	34	43	5 ^u	11	0	71	-41 ^u	
	H ₀ K ₀	11 ₀	4	8	116	13	-7	-11	13	52	3 ^u -12	20	43	-32 ^u	12	170	11	-4	
-17	113	19	5	9	132	16	5	-10	107	19	3	-11	47	23	15 ^u	H ₀ K ₀	12 ₀	3	
-16	0	52	-28 ^u	10	26	64	6 ^u	-9	137	11	1	-10	382	7	2	-18	119	13	6
-15	139	10	-3	11	0	56	-37 ^u	-8	143	9	3	-9	60	16	-9 ^u -17	68	30	62 ^u	
-14	106	13	19	H ₀ K ₀	11 ₀	6	-7	40	58	-23 ^u	-8	209	8	-4	-16	127	11	12	
-13	254	6	0	-15	99	15	16	-6	44	48	13 ^u	-7	48	17	3 ^u -15	86	27	-4 ^u	
-12	92	12	-6	-14	104	20	8 ^u	-5	106	13	-10	-6	320	6	2	-14	258	7	-2
-11	57	19	43 ^u	-13	168	9	0	-4	187	7	15	-5	0	38	-29 ^u -13	0	45	-26 ^u	
-10	82	13	14	-12	83	24	10 ^u	-3	126	12	18	-4	389	7	0	-12	58	22	23 ^u
-9	327	7	-7	-11	27	48	21 ^u	-2	30	49	-18 ^u	-3	124	7	-4	-11	56	20	3 ^u
-8	160	7	-8	-10	78	15	-8 ^u	-1	58	29	36 ^u	-2	199	5	-10	-10	320	6	-8
-7	167	9	-2	-9	234	10	-1	0	137	19	0	-1	72	10	-11	-9	140	7	6
-6	51	17	25 ^u	-8	147	9	3	1	134	9	18	0	350	6	2	-8	156	6	1
-5	218	5	1	-7	99	13	-1	2	122	11	15	1	31	39	8 ^u	-7	44	26	10 ^u
-4	132	6	-10	-6	10	43	-3 ^u	3	0	62	-24 ^u	2	11	44	-3 ^u	-6	314	6	-2
-3	294	6	-2	-5	165	8	-1	4	31	53	-34 ^u	3	40	38	22 ^u	-5	183	7	1
-2	52	18	-15 ^u	-4	205	6	4	5	75	25	-12 ^u	4	397	7	-2	-4	345	7	1
-1	174	5	12	-3	220	7	-3	6	99	18	-14	5	50	27	39 ^u	-3	0	44	-24 ^u
0	172	6	-9	-2	62	18	-13 ^u	H ₀ K ₀	11 ₀	9	6	178	8	11	-2	162	6	-9	
1	302	6	-4	-1	134	9	3	-9	0	54	-2 ^u	7	56	23	33 ^u	-1	107	9	-9
2	107	11	5	0	158	9	-5	-8	77	24	24 ^u	8	148	9	-3	0	302	6	4
3	73	13	2	1	175	7	-1	-7	75	42	3 ^u	9	46	56	8 ^u	1	73	24	-15 ^u
4	86	12	-9	2	133	19	4	-6	128	13	-19	10	224	9	4	2	39	42	-24 ^u
5	269	6	5	3	61	27	19 ^u	-5	78	21	2 ^u	11	45	70	37 ^u	3	45	28	-4 ^u
6	80	26	-27 ^u	4	118	9	29	-4	31	51	23 ^u	12	0	55	-6 ^u	4	281	6	0
7	161	13	8	5	191	13	14	-3	82	30	40 ^u	H ₀ K ₀	12 ₀	2	5	58	24	-1 ^u	
8	0	50	-26 ^u	6	128	18	-2	-2	147	13	-10	-18	142	13	-9	6	178	7	12
9	120	11	26	7	108	22	-2 ^u	-1	62	32	-22 ^u -17	50	51	6 ^u	7	0	49	-11 ^u	
10	87	18	16 ^u	8	21	53	19 ^u	0	71	23	-8 ^u -16	198	7	5	8	114	12	-13	
11	146	14	4	9	83	28	12 ^u	1	64	26	61 ^u -15	49	31	26 ^u	9	63	26	-11 ^u	
	H ₀ K ₀	11 ₀	5	H ₀ K ₀	11 ₀	7	2	75	29	-12 ^u -14	79	15	-23 ^u	10	178	16	3		
-17	146	14	15	-14	70	25	32 ^u	3	63	78	-8 ^u -13	73	15	12 ^u	11	48	54	36 ^u	
-16	117	13	6	-13	43	65	0 ^u	H ₀ K ₀	12 ₀	0	-12	369	7	1	H ₀ K ₀	12 ₀	4		
-15	160	12	-8	-12	112	14	1	-18	169	15	12	-11	104	9	-4	-17	81	29	-3 ^u
-14	62	23	8 ^u	-11	156	10	-2	-16	211	7	5	-10	114	9	-1	-16	149	10	-2
-13	86	18	-15 ^u	-10	116	19	9	-14	64	20	18 ^u	-9	96	9	4	-15	49	55	19 ^u
-12	119	10	4	-9	75	15	69 ^u	-12	509	9	-6	-8	331	6	4	-14	92	14	2
-11	220	6	5	-8	75	24	8 ^u	-10	128	7	8	-7	97	9	2	-13	93	12	4
-10	150	7	-2	-7	157	8	-5	-8	331	6	3	-6	297	6	4	-12	237	6	1
-9	26	59	10 ^u	-6	174	11	-3	-6	284	6	11	-5	52	14	21 ^u -11	121	11	10	
-8	55	20	-16 ^u	-5	125	10	-7	-4	312	7	-4	-4	296	5	3	-18	26	60	-3 ^u
-7	241	6	-3	-4	0	46	-5 ^u	-2	333	6	1	-3	95	8	0	-9	50	24	-17 ^u
-6	190	6	0	-3	74	20	-15 ^u	0	147	6	-6	-2	339	6	-4	-8	276	6	7
-5	205	6	-1	-2	187	7	-5	2	463	9	-1	-1	68	15	-2 ^u	-7	158	8	2
-4	70	12	7	-1	169	7	-2	4	149	7	9	0	82	20	3 ^u	-6	203	6	-3
-3	141	8	2	0	117	13	-1	6	299	8	-4	1	80	10	7	-5	44	23	37 ^u
-2	136	9	-3	1	61	22	43 ^u	8	250	7	-1	2	354	6	0	-4	209	7	-6
-1	266	7	2	2	82	19	-15 ^u	10	55	63	14 ^u	3	88	11	-3	-3	166	7	-1
0	98	10	-5	3	145	11	11	12	193	9	6	4	139	8	-6	-2	349	7	-9
1	8	53	-17 ^u	4	120	11	3	H ₀ K ₀	12 ₀	1	5	30	43	11 ^u	-1	59	31	8 ^u	
2	114	16	15	5	0	51	-59 ^u	-18	128	12	-8	6	259	8	-7	0	27	40	22 ^u

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
1	133	7	-1	2	214	9	-5	0	64	32	-19*	-12	71	18	-4*	-14	37	48	-17*
2	305	6	-3	3	145	8	13	1	62	35	-19*	-11	377	7	-2	-13	40	47	-1*
3	152	8	15	4	87	15	2		H _o K= 13,	0	-10	129	8	0	-12	71	29	-23*	
4	93	11	4	5	63	23	14*	-17	121	12	0	-9	143	9	-4	-11	247	7	-1
5	26	45	10*	6	115	12	7	-15	197	7	-2	-8	0	43	-11*	-10	151	9	-4
6	176	9	5	7	113	22	1*	-13	100	11	0	-7	345	6	2	-9	128	10	0
7	118	19	-2	8	100	32	-4*	-11	329	9	3	-6	102	9	-13	-8	64	19	-13*
8	154	10	-6		H _o K= 12,	7	-9	168	6	-2	-5	321	6	-2	-7	210	6	-2	
9	44	54	29*	-13	67	27	-12*	-7	364	8	5	-4	44	24	-15*	-6	164	7	-3
10	78	21	23*	-12	20	52	1*	-5	394	7	-2	-3	182	6	-3	-5	253	6	4
		H _o K= 12,	5	-11	116	18	7	-3	188	5	-6	-2	28	42	14*	-4	78	11	27
-16	82	20	-7*	-10	117	12	-12	-1	406	7	-10	-1	397	7	-1	-3	149	10	-2
-15	130	12	26	-9	130	11	-3	1	71	12	11	0	35	39	16*	-2	86	11	11
-14	173	8	-1	-8	66	19	12*	3	380	7	-1	1	49	34	16*	-1	310	6	3
-13	70	40	-7*	-7	11	48	4*	5	191	6	9	2	73	14	-12*	0	66	15	4*
-12	57	33	39*	-6	147	9	9	7	162	8	6	3	339	6	4	1	70	24	-10*
-11	103	11	-1	-5	165	10	-7	9	185	16	-4	4	36	46	18*	2	127	9	9
-10	209	6	1	-4	141	11	10	11	0	78	-4*	5	147	8	-12	3	271	7	-14
-9	164	9	1	-3	50	38	18*		H _o K= 13,	1	6	48	50	23*	4	24	60	-32*	
-8	70	14	7*	-2	88	13	28	-18	34	55	18*	7	119	10	15	5	171	9	-3
-7	0	43	-46*	-1	140	10	8	-17	165	14	-15	8	54	35	-15*	6	24	48	-6*
-6	200	6	-5	0	183	11	2	-16	48	58	41*	9	179	16	-4	7	83	20	-15*
-5	173	6	5	1	136	9	11	-15	88	14	5	10	77	32	70*	8	79	21	-12*
-4	224	7	2	2	74	17	26*	-14	43	65	-7*	11	0	67	-9*	9	139	12	-3
-3	58	17	38*	3	61	26	-15*	-13	296	9	3		H _o K= 13,	3		H _o K= 13,	5		
-2	101	10	11	4	122	12	0	-12	0	44	-6*	-17	155	12	-7	-16	35	75	-10*
-1	203	6	-7	5	121	13	2	-11	53	21	-11*	-16	26	54	-2*	-15	46	68	-16*
0	312	6	1	6	65	31	-30*	-10	47	26	11*	-15	87	14	12	-14	104	13	19
1	78	14	2	7	62	33	54*	-9	318	6	3	-14	82	15	6*	-13	160	9	-19
2	83	12	9		H _o K= 12,	8	-8	82	11	16	-13	278	7	-4	-12	105	14	19	
3	71	17	13*	-11	122	12	19	-7	259	6	0	-12	84	17	-14*	-11	18	47	-25*
4	217	9	1	-10	7	53	2*	-6	44	31	-2*	-11	0	47	-30*	-10	47	35	5*
5	117	11	-5	-9	56	56	-18*	-5	275	5	7	-10	47	27	1*	-9	224	9	-10
6	146	15	0	-8	115	12	19	-4	40	25	13*	-9	345	7	-4	-8	169	14	-5
7	49	50	47*	-7	171	9	0	-3	394	7	2	-8	139	8	6	-7	168	7	-8
8	84	39	-9*	-6	101	16	14	-2	39	30	24*	-7	241	6	1	-6	68	17	41*
9	75	24	-7*	-5	32	50	23*	-1	65	12	23	-6	25	47	-9*	-5	174	9	0
10	126	14	1	-4	104	13	2	0	29	41	20*	-5	233	6	2	-4	146	8	-7
		H _o K= 12,	6	-3	141	10	2	1	397	7	0	-4	107	8	9	-3	229	6	-6
-15	40	61	3*	-2	103	14	-7	2	55	18	10*	-3	338	7	6	-2	82	31	-5*
-14	85	17	23*	-1	73	20	-8*	3	201	6	-7	-2	47	23	-12*	-1	46	30	17*
-13	106	30	0*	0	0	58	-1*	4	45	30	32*	-1	69	13	9*	0	106	10	-2
-12	138	12	-1	1	97	15	7	5	236	10	-7	0	117	12	3	1	263	7	1
-11	116	11	-1	2	99	16	-7	6	0	47	-38*	1	345	7	-9	2	105	13	14
-10	47	53	26*	3	92	29	-4*	7	218	8	-3	2	41	47	20*	3	188	17	15
-9	83	22	4*	4	53	57	-2*	8	0	50	-3*	3	111	10	-3	4	67	20	13*
-8	172	7	-10	5	17	55	-18*	9	51	45	-6*	4	32	44	13*	5	149	12	-3
-7	175	9	-5		H _o K= 12,	9	10	45	54	20*	5	186	7	7	6	109	13	0	
-6	105	10	3	-8	28	54	-8*	11	187	11	5	6	188	11	22	7	159	12	11
-5	24	46	2*	-7	27	56	7*		H _o K= 13,	2	7	188	8	-4	8	46	55	18*	
-4	150	7	0	-6	65	29	-16*	-18	0	53	-14*	8	23	59	8*	9	92	28	48*
-3	147	10	1	-5	144	11	12	-17	117	15	3	9	67	25	21*		H _o K= 13,	6	
-2	243	6	7	-4	103	17	22	-16	53	39	-24*	10	26	56	-29*	-14	56	38	-4*
-1	126	10	14	-3	58	62	12*	-15	208	8	-7		H _o K= 13,	4	-13	56	70	40*	
0	0	48	-6*	-2	52	76	28*	-14	37	51	28*	-16	95	15	9	-12	96	23	2*
1	153	8	9	-1	120	21	-3	-13	32	46	-25*	-15	207	12	15	-11	164	9	2

STRUCTURE FACTORS CONTINUED FOR
URANYL UREA NITRATE

L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-10	90	16	-12	-4	123	14	-3	-9	39	59	-18*	-9	102	22	-20*	0	214	7	1
-9	69	20	0*	-3	112	14	26	-8	243	6	2	-8	167	9	2	1	93	16	-9
-8	59	22	28*	-2	71	27	5*	-7	24	41	13*	-7	0	44	-8*	2	71	41	5*
-7	142	12	-6		H ₀ K=	14,	0	-6	265	6	-5	-6	202	8	-13	3	0	61	-33*
-6	180	7	8	-16	50	55	-22*	-5	123	7	7	-5	170	6	10	4	109	32	-11*
-5	145	9	-10	-14	256	7	-12	-4	392	9	-7	-4	278	6	3	5	123	12	2
-4	70	16	3*	-12	31	45	4*	-3	82	15	-11	-3	30	45	-24*	6	85	38	-39*
-3	117	11	16	-10	299	7	3	-2	31	41	18*	-2	37	43	6*		H ₀ K=	14,	7
-2	108	11	-10	-8	188	7	-10	-1	52	19	29*	-1	46	30	-3*	-12	111	15	-10
-1	203	7	-4	-6	237	6	-7	0	293	6	4	0	290	7	-3	-11	115	14	-6
0	119	11	8	-4	419	8	9	1	92	10	10	1	82	23	-17*	-10	78	19	22*
1	13	60	-40*	-2	36	39	26*	2	188	9	-1	2	65	21	-31*	-9	36	51	11*
2	90	16	25	0	357	6	-3	3	45	50	34*	3	25	50	17*	-8	118	13	-8
3	187	8	8	2	181	6	-7	4	217	7	0	4	149	9	1	-7	146	10	-2
4	110	16	-22	4	232	7	0	5	59	22	28*	5	99	14	0	-6	132	12	15
5	118	13	-12	6	206	9	3	6	177	8	-7	6	176	9	-6	-5	46	49	-2*
6	0	54	-28*	8	0	58	-54*	7	0	51	-2*	7	17	59	2*	-4	64	24	-12*
7	36	60	-28*	10	195	11	18	8	46	53	-6*	8	94	32	46*	-3	139	9	20
	H ₀ K=	13,	7		H ₀ K=	14,	1	9	63	31	16*		H ₀ K=	14,	5	-2	151	16	6
-13	103	23	-16*	-17	33	52	4*	10	166	11	6	-15	14	68	-52*	-1	85	17	-17*
-12	110	14	10	-16	221	7	-4		H ₀ K=	14,	3	-14	58	30	28*	0	66	23	25*
-11	67	24	44*	-15	0	52	-6*	-17	32	55	-25*	-13	70	43	-3*	1	75	24	8*
-10	88	16	5*	-14	35	46	28*	-16	188	9	-5	-12	165	9	-15	2	105	15	-15
-9	165	8	19	-13	17	59	-32*	-15	13	50	-17*	-11	126	10	4	3	113	16	-3
-8	146	9	0	-12	326	7	-1	-14	59	23	40*	-10	54	27	-1*	4	117	18	21
-7	94	14	-8	-11	0	49	-38*	-13	80	29	13*	-9	28	51	-7*		H ₀ K=	14,	8
-6	0	49	-27*	-10	131	8	12	-12	239	8	0	-8	211	7	2	-9	140	12	8
-5	132	10	9	-9	77	13	-3	-11	76	15	2*	-7	131	8	-3	-8	93	17	4*
-4	150	9	-1	-8	310	7	-9	-10	125	9	15	-6	185	7	1	-7	0	64	-21*
-3	150	9	-2	-7	43	29	31*	-9	30	43	5*	-5	81	20	4*	-6	65	66	-23*
-2	101	12	8	-6	340	7	-11	-8	288	6	-9	-4	115	9	2	-5	135	15	0
-1	16	48	3*	-5	70	17	-3*	-7	140	8	-12	-3	130	12	-4	-4	126	12	15
0	113	11	14	-4	129	9	7	-6	315	6	-20	-2	263	9	-3	-3	42	57	-34*
1	161	9	0	-3	34	39	25*	-5	42	47	-27*	-1	89	13	-14	-2	0	59	-10*
2	118	16	12	-2	418	8	-6	-4	156	7	-1	0	92	14	5	-1	97	16	-3
3	47	64	-10*	-1	66	20	-7*	-3	54	19	-8*	1	76	28	-8*	0	112	22	0*
4	69	23	38*	0	102	9	8	-2	361	8	-2	2	189	8	-10	1	90	22	5*
5	95	17	7	1	29	42	14*	-1	129	9	0	3	115	13	-2		H ₀ K=	15,	0
6	80	25	-35*	2	303	6	-9	0	112	9	-2	4	125	12	-2	-17	209	11	7
	H ₀ K=	13,	8	3	32	44	23*	1	25	45	-41*	5	37	51	11*	-15	60	26	28*
-10	115	14	-5	4	140	14	-15	2	249	6	6	6	63	42	-12*	-13	247	7	-1
-9	72	22	29*	5	9	46	4*	3	49	32	-15*	7	66	29	-22*	-11	120	9	-5
-8	67	28	30*	6	146	21	6	4	119	11	-18		H ₀ K=	14,	6	-9	280	7	8
-7	112	13	12	7	43	59	9*	5	0	68	-17*	-13	115	12	21	-7	326	6	-3
-6	126	13	-29	8	203	10	-5	6	123	12	11	-12	51	47	32*	-5	100	10	-17
-5	87	30	-7*	9	53	53	46*	7	84	17	8*	-11	70	41	10*	-3	415	8	-11
-4	61	41	16*	10	9	64	5*	8	176	10	10	-10	166	9	8	-1	123	9	-1
-3	58	61	13*		H ₀ K=	14,	2	9	27	63	1*	-9	129	12	-12	1	262	7	-8
-2	147	9	15	-17	43	51	22*		H ₀ K=	14,	4	-8	127	10	-7	3	231	6	1
-1	112	23	-2*	-16	80	19	6*	-16	90	17	8*	-7	40	51	33*	5	150	12	4
0	100	14	10	-15	0	49	-27*	-15	51	59	-9*	-6	127	10	-9	7	199	9	8
1	28	53	-3*	-14	254	9	1	-14	213	8	0	-5	116	11	-7	9	24	56	-5*
2	45	59	-8*	-13	40	45	29*	-13	33	54	-29*	-4	191	7	2		H ₀ K=	15,	1
3	94	17	11	-12	36	45	5*	-12	19	47	3*	-3	79	16	-5*	-17	95	18	39*
	H ₀ K=	13,	9	-11	42	44	-9*	-11	54	28	6*	-2	46	47	32*	-16	51	57	15*
-5	69	27	11*	-10	278	6	-9	-10	241	7	-14	-1	73	19	-22*	-15	236	9	0

STRUCTURE FACTORS CONTINUED FOR
URANYL UREA NITRATE

L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL			
-14	7	52	-7*	-11	268	7	3	-3	0	52	-18*	2	234	7	0	-13	70	36	0*			
-13	50	29	19*	-10	73	17	-9*	-2	98	13	8	4	182	14	-1	-12	106	16	5			
-12	21	53	5*	-9	220	6	1	-1	229	7	11	6	58	38	-28*	-11	0	47	-5*			
-11	29	6	7	-8	57	23	32*	0	121	11	3		H,K= 16,	1	-18	184	9	-8				
-10	43	44	7*	-7	185	9	2	1	111	11	29	-16	25	53	-7*	-9	90	13	-3			
-9	19	8	3	-6	99	10	6	2	44	63	10*	-15	42	60	37*	-8	243	7	-7			
-8	49	24	29*	-5	283	6	-4	3	147	10	8	-14	238	9	6	-7	37	46	22*			
-7	28	5	8	-2	-4	0	45	-35*	4	111	17	2	-13	21	54	-9*	-6	112	19	3		
-6	63	20	3*	-3	42	59	32*	5	134	16	3	-12	157	17	0	-5	136	9	0			
-5	35	8	7	-7	-2	44	38	-6*	6	0	56	-16*	-11	57	24	29*	-4	259	6	0		
-4	25	50	21*	-1	313	7	3		H,K= 15,	6	-18	210	6	-2	-3	59	65	9*				
-3	0	46	-8*	0	81	22	-13*	-12	100	22	4*	-9	29	46	19*	-2	84	19	16*			
-2	0	55	-17*	1	121	10	1	-11	19	54	-51*	-8	252	6	10	-1	51	65	-3*			
-1	34	2	7	0	2	0	47	-28*	-10	58	38	47*	-7	25	44	11*	0	218	7	-5		
0	71	22	13*	3	156	8	2	-9	132	13	4	-6	97	12	4	1	79	28	-11*			
1	237	7	19	4	86	18	8*	-8	121	13	1	-5	47	50	2*	2	124	14	-5			
2	41	47	35*	5	154	9	4	-7	164	8	17	-4	300	6	-1	3	31	49	9*			
3	160	9	-8	6	34	51	26*	-6	29	56	-12*	-3	68	15	27*	4	99	18	-11			
4	73	31	31*	7	75	22	25*	-5	76	20	9*	-2	0	45	-19*	5	21	54	-31*			
5	172	8	12	8	59	67	11*	-4	150	9	12	-1	34	45	23*	6	152	11	4			
6	29	53	27*		H,K= 15,	4	-3	142	9	-6	0	281	8	0		H,K= 16,	4					
7	64	31	-18*	-15	53	43	15*	-2	97	16	-2	1	19	64	-19*	-14	20	64	-7*			
8	0	71	-24*	-14	29	53	-3*	-1	0	50	-44*	2	130	11	-23	-13	69	22	29*			
9	16	8	12	3	-13	221	11	-14	0	63	24	10*	3	40	49	22*	-12	177	9	-16		
	H,K= 15,	2	-12	102	13	-5	1	155	10	2	4	133	10	-1	-11	104	16	16				
-16	58	32	31*	-11	91	14	-11	2	119	18	-2	5	98	12	89	-10	139	9	-5			
-15	59	28	26*	-10	50	29	31*	3	76	34	-1*	6	185	10	-8	-9	0	48	-8*			
-14	34	48	14*	-9	185	7	-3	4	0	66	-5*	7	46	62	33*	-8	146	9	-9			
-13	28	1	7	5	-8	106	11	-14		H,K= 15,	7		H,K= 16,	2	-7	144	8	5				
-12	54	27	-19*	-7	270	6	3	-10	116	14	-6	-16	220	9	8	-6	211	7	2			
-11	112	10	-15	-6	47	52	16*	-9	108	22	11*	-15	58	31	15*	-5	21	58	-5*			
-10	25	57	-26*	-5	112	13	4	-8	62	47	60*	-14	63	26	18*	-4	10	58	-11*			
-9	28	7	6	3	-4	120	9	-10	-7	53	55	-23*	-13	37	73	-22*	-3	121	11	4		
-8	90	11	4	-3	241	6	14	-6	119	12	7	-12	242	7	2	-2	234	7	-1			
-7	28	4	7	-5	-2	101	12	8	-5	115	20	-5	-11	35	48	15*	-1	120	10	16		
-6	45	47	4*	-1	50	58	-18*	-4	60	29	-5*	-10	219	6	11	0	68	21	-5*			
-5	96	10	3	0	104	11	1	-3	0	54	-14*	-9	45	51	22*	1	56	60	27*			
-4	60	17	3*	1	216	7	-2	-2	71	24	-27*	-8	196	8	-3	2	139	13	4			
-3	37	5	8	4	2	85	17	-3*	-1	117	18	-13	-7	113	10	14	3	64	35	-22*		
-2	68	20	3*	3	118	15	-6	0	110	16	12	-6	315	6	-8	4	140	11	-2			
-1	88	12	1	4	41	49	39*	1	61	63	12*	-5	0	45	-19*	5	39	59	35*			
0	67	18	-5*	5	97	16	4	2	0	64	-22*	-4	74	14	31*		H,K= 16,	5				
1	25	3	8	-9	6	61	32	-20*		H,K= 15,	8	-3	44	44	-8*	-13	109	18	18			
2	74	16	2*	7	144	14	3	-5	48	56	11*	-2	247	7	-4	-12	18	56	-31*			
3	15	1	9	-4		H,K= 15,	5	-4	92	28	-25*	-1	99	11	-4	-11	33	51	24*			
4	49	61	38*	-14	100	16	14	-3	93	18	-7*	0	99	13	13	-10	136	11	-8			
5	79	20	-14*	-13	17	52	-9*		H,K= 16,	0	1	0	48	-4*	-9	110	12	3				
6	59	29	-7*	-12	41	56	18*	-16	236	8	3	2	204	8	-3	-8	175	8	3			
7	18	4	15	-2	-11	155	9	-8	-14	52	53	15*	3	16	49	-16*	-7	34	49	1*		
8	23	55	8*	-10	97	21	-8*	-12	274	9	6	4	151	10	-5	-6	91	13	24			
	H,K= 15,	3	-9	181	10	4	-10	180	7	-6	5	47	51	46*	-5	181	13	-12				
-16	51	53	3*	-8	0	66	-9*	-8	188	7	-8	6	96	33	31*	-4	190	7	11			
-15	20	4	16	-4	-7	99	15	-3	-6	287	6	2	7	70	25	33*	-3	95	13	29		
-14	87	16	10	-6	118	10	-6	-4	43	36	30*		H,K= 16,	3	-2	42	49	-25*				
-13	53	63	9*	-5	201	7	11	-2	297	6	1	-15	60	30	34*	-1	43	61	-17*			
-12	34	47	-11*	-4	47	48	-8*	0	73	16	13*	-14	209	9	1	0	176	12	8			

STRUCTURE FACTORS CONTINUED FOR URANYL UREA NITRATE

L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
1	107	17	-11	0	14	48	5*	-8	2	60	-16*	-9	29	51	24*	-7	71	22	17*
2	101	15	4	1	184	12	-11	-7	60	26	-24*	-8	68	23	-11*	-6	99	59	36*
3	31	53	19*	2	69	32	29*	-6	83	17	6*	-7	65	59	22*	-5	82	17	28*
4	84	31	7*	3	176	9	2	-5	200	7	0	-6	228	8	-18	-4	222	8	-1
	H ₀ K ₀	16 ₀	6	4	50	52	47*	-4	86	17	26*	-5	39	48	1*	-3	40	53	-26*
-11	124	21	7	5	73	29	-7*	-3	0	58	-45*	-4	50	63	25*	-2	81	19	9*
-10	105	24	8*	6	78	22	51*	-2	88	15	4	-3	0	49	-10*	-1	31	53	16*
-9	54	69	51*		H ₀ K ₀	17 ₀	2	-1	184	9	1	-2	256	7	0	0	153	10	23
-8	79	20	-3*	-15	196	10	2	0	74	38	-14*	-1	21	50	-13*	1	110	18	6
-7	106	13	16	-14	57	70	13*	1	77	22	-22*	0	119	11	8	2	130	13	-6
-6	163	9	15	-13	130	14	17	2	10	53	-4*	1	0	58	-5*		H ₀ K ₀	18 ₀	5
-5	78	18	15*	-12	0	63	-18*	3	114	15	-8	2	129	25	6*	-9	0	55	-33*
-4	0	52	-5*	-11	191	8	-15	4	56	58	-1*	3	32	59	23*	-8	99	15	29
-3	101	17	-6	-10	59	34	33*		H ₀ K ₀	17 ₀	5	4	174	11	-13	-7	113	15	29
-2	137	16	-5	-9	191	7	-4	-11	105	15	1		H ₀ K ₀	18 ₀	2	-6	172	9	14
-1	77	26	-22*	-8	40	46	31*	-10	28	59	26*	-13	75	22	21*	-5	46	54	-30*
0	32	54	-33*	-7	100	14	9	-9	77	22	-20*	-12	146	16	4	-4	43	69	11*
1	22	63	-11*	-6	58	23	24*	-8	107	25	0*	-11	46	57	33*	-3	46	53	4*
2	122	21	13	-5	270	6	9	-7	146	10	-17	-10	153	9	7	-2	146	11	-6
	H ₀ K ₀	16 ₀	7	-4	27	51	1*	-6	81	23	21*	-9	62	23	7*	-1	75	24	-17*
-8	109	15	-9	-3	58	33	17*	-5	41	51	19*	-8	245	7	-1		H ₀ K ₀	19 ₀	0
-7	43	54	-7*	-2	0	48	-42*	-4	100	15	-3	-7	5	53	-17*	-11	191	8	10
-6	58	37	13*	-1	268	7	6	-3	170	11	-4	-6	50	51	18*	-9	114	13	-2
-5	98	16	-5	0	68	19	13*	-2	79	33	2*	-5	23	48	4*	-7	252	10	-12
-4	130	13	10	1	93	23	-10*	-1	62	31	-9*	-4	239	7	7	-5	60	43	35*
-3	101	21	15*	2	0	50	-4*	0	59	32	25*	-3	73	18	25*	-3	222	8	2
-2	55	48	32*	3	110	13	5	1	143	16	16	-2	84	17	-16*	-1	130	18	-11
-1	55	50	-5*	4	67	25	25*	2	182	16	6	-1	0	60	-5*	1	115	17	5
	H ₀ K ₀	17 ₀	0	5	163	11	-2		H ₀ K ₀	17 ₀	6	0	185	9	-10		H ₀ K ₀	19 ₀	1
-15	224	8	8		H ₀ K ₀	17 ₀	3	-9	127	14	4	1	44	72	-21*	-12	57	34	56*
-13	106	13	-7	-14	54	56	27*	-8	71	24	46*	2	165	10	3	-11	146	13	9
-11	209	8	9	-13	211	8	-3	-7	83	23	25*	3	56	58	41*	-10	0	58	-19*
-9	174	8	-1	-12	61	28	-5*	-6	87	26	-9*	4	72	27	-5*	-9	206	8	-1
-7	134	13	6	-11	167	9	10	-5	141	11	7		H ₀ K ₀	18 ₀	3	-8	34	54	17*
-5	269	6	-5	-10	54	29	25*	-4	78	21	8*	-13	12	55	-18*	-7	62	32	38*
-3	30	45	15*	-9	130	10	0	-3	12	58	-31*	-12	183	9	13	-6	57	29	52*
-1	257	8	-2	-8	54	34	-48*	-2	83	31	26*	-11	33	53	-23*	-5	237	7	6
1	161	17	0	-7	225	7	6	-1	132	15	0	-10	178	11	-6	-4	20	51	7*
3	122	14	4	-6	38	50	-1*	0	95	26	-14*	-9	39	51	8*	-3	126	15	17
5	172	10	1	-5	36	47	10*		H ₀ K ₀	18 ₀	0	-8	90	16	-16	-2	0	53	-3*
	H ₀ K ₀	17 ₀	1	-4	54	29	-8*	-14	172	11	-2	-7	74	19	-10*	-1	187	9	-2
-15	42	52	29*	-3	251	7	-1	-12	157	14	-14	-6	219	8	-4	0	63	27	28*
-14	31	71	9*	-2	16	56	-35*	-10	152	11	3	-5	47	51	-19*	1	166	10	5
-13	227	9	5	-1	77	17	3*	-8	228	7	7	-4	18	53	-11*	2	0	55	-10*
-12	0	49	-26*	0	57	33	10*	-6	73	18	51*	-3	56	66	-1*		H ₀ K ₀	19 ₀	2
-11	206	7	6	1	166	9	3	-4	246	7	12	-2	211	8	-4	-12	41	54	-23*
-10	10	55	-18*	2	112	12	36	-2	85	29	-13*	-1	56	67	2*	-11	191	9	18
-9	162	8	1	3	156	11	12	0	240	7	12	0	114	13	1	-10	42	66	22*
-8	25	47	-30*	4	49	55	44*	2	180	9	0	1	57	34	51*	-9	98	18	1*
-7	235	7	5	5	15	57	-47*	4	77	29	-4*	2	120	18	10	-8	48	53	-4*
-6	33	48	23*		H ₀ K ₀	17 ₀	4		H ₀ K ₀	18 ₀	1	3	47	64	-7*	-7	241	8	-2
-5	0	46	-54*	-13	46	55	-17*	-14	115	13	29		H ₀ K ₀	18 ₀	4	-6	46	58	0*
-4	43	58	28*	-12	50	54	38*	-13	0	54	-21*	-11	33	54	8*	-5	66	26	22*
-3	291	6	0	-11	129	13	-23	-12	195	9	7	-10	151	10	6	-4	0	54	-35*
-2	29	46	18*	-10	77	22	13*	-11	42	54	34*	-9	110	16	11	-3	236	7	9
-1	88	14	-6	-9	214	8	1	-10	190	8	1	-8	185	9	2	-2	71	29	42*

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