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DIETHYLLAMMONIUM ETHOXYBIS (DIETHYLMONOTHIOCARBAMATO) DIOXOURANATE (VI),
(C₂H₅)₂NH₂ [UO₂((C₂H₅)₂NCOS)₂OC₂H₅]

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Publication Date

1978-05-01

Submitted to Inorganic Chemistry

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DIETHYLMAMMONIUM ETHOXYBIS(DIETHYLMONOTHIOCARBAMATO)DIOXOURANATE(VI),
 $(C_2H_5)_2NH_2^+ [UO_2((C_2H_5)_2NCOS)_2OC_2H_5]^-$

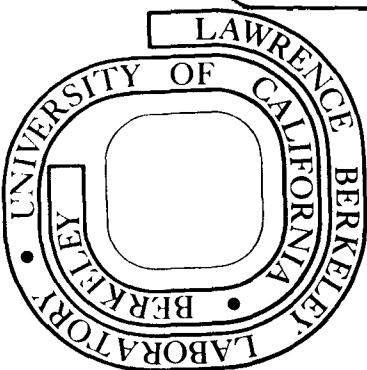
Dale L. Perry, David H. Templeton, and
Allan Zalkin

May 1978

Prepared for the U. S. Department of Energy
under Contract W-7405-ENG-48

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Structure of

Diethylammonium Ethoxybis(diethylmonothiocarbamato)dioxouranate(VI),
 $(C_2H_5)_2NH_2^+ [UO_2((C_2H_5)_2NCOS)_2OC_2H_5]^{-1}$

by Dale L. Perry*,² David H. Templeton*, and Allan Zalkin*

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and

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While a rather large number of metal dithiocarbamate complexes^{3,4} have been extensively investigated, relatively little attention has been given to the analogous monothiocarbamate species. This is particularly unfortunate in light of recent reports⁵⁻⁹ which indicate that the chemistry of this class of compounds will be as interesting and novel as that of the corresponding dithiocarbamates. The tris(dialkylmonothiocarbamato)iron(III) chelates,⁵ $Fe(R_2mtc)_3$, for example, have been shown to exhibit anomalous magnetic behavior arising from ²T(low spin, $S = 1/2$) \rightleftharpoons ⁶A(high spin, $S = 5/2$) spin-state interconversion processes. As a result, these compounds with their FeS_3O_3 metal centers are electronically and structurally similar to their iron(III) dithiocarbamate analogs containing the FeS_6 core.

In the uranyl monothiocarbamate alkoxide series⁶ of complexes, however, one sees several features that are markedly different from

those displayed by the corresponding dithiocarbamates. The reaction of dialkylammonium monothiocarbamates with uranyl salts affords a new synthetic route for the preparation of uranyl alkoxides; also, these compounds represent the first examples of a mixed alkoxide-bidentate chelate system (where the donor atoms are sulfur and oxygen) of an actinide ion. Since these compounds also contain three different types of uranium-oxygen bonds in the same molecule, their structural and bonding parameters are of considerable interest. The present paper represents the first structural investigation of this class of uranyl compounds and is part of an ongoing research program centered around the chemistry of the lanthanide and actinide-sulfur bond.

EXPERIMENTAL SECTION

The title compound was prepared according to a method described elsewhere⁶ which essentially consisted of bubbling carbonyl sulfide (Matheson, 97.5% purity) through a solution of diethylamine in ethanol at 0°C for 5-10 minutes followed by the addition of a saturated ethanolic solution of $\text{UO}_2\text{Cl}_2 \cdot 3\text{H}_2\text{O}$ (Alfa Products) with stirring. The bright yellow complex that precipitated from solution was filtered on a Buchner funnel and air-dried. Anal. Calcd. for $(\text{C}_2\text{H}_5)_2\text{NH}_2^+[\text{UO}_2((\text{C}_2\text{H}_5)_2\text{NCOS})_2\text{OC}_2\text{H}_5]^-$: C, 29.46; H, 5.67; N, 6.44; S, 9.81. Found: C, 29.47; H, 5.64; N, 6.42; S, 9.38.

A crystal suitable for data collection was inserted into a 0.2 mm quartz capillary and sealed. It was later ascertained that the crystals are stable in air and the precaution of sealing them in capillaries was not necessary. The crystal had the shape of a hexagonal prism with dimensions approximately 0.2 mm in cross section and 0.25 mm long. It was examined with a Picker FACS-I automatic diffractometer equipped with a graphite monochromator and a Mo X-ray tube ($\lambda(K\alpha_1)$ 0.70930 Å). Omega scans of several low angle reflections showed peaks with half-widths of 0.09 to 0.12°. The space group is $P2_1/n$. The setting angles of 12 manually centered reflections ($39^\circ < 2\theta < 45^\circ$) were used to determine by least squares the following cell parameters: $a = 9.518(4)$ Å, $b = 12.457(5)$ Å, $c = 22.490(10)$ Å, $\beta = 93.77(5)^\circ$ and $V = 2661$ Å³. For $Z = 4$ and a molecular weight of 653.6 the calculated density is 1.63 gm cm^{-3} .

Intensity data were collected using the θ - 2θ scan technique with a scan speed of 2°/min on 2θ . Each peak was scanned 0.7° before the $K\alpha_1$ peak to 0.7° after the $K\alpha_2$ peak, and backgrounds were counted for 4 seconds at each end of the scan range. The temperature during data collection was $23 \pm 1^\circ \text{ C}$. Three standard reflections were measured after every 200th scan. A total of 10,257 scans were performed of which over 3400 were rejected because of misalignment due to the crystal moving in the capillary. The 6357 scans, excluding the standard reflections, resulted in 4622 unique reflections of which 2542 had $I > 3\sigma$. No absorption correction was applied; the maximum and minimum transmission factors are estimated to be 0.40 and 0.34 respectively, for an estimated absorption coefficient of 60 cm^{-1} .

A three-dimensional Patterson calculation showed the positions of the uranium atom, two sulfur and two oxygen atoms. Subsequent least-squares refinements and difference Fouriers revealed all of the atoms in the structure shown in Fig. 1. 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 0.05. Scattering factors from Doyle and Turner¹⁰ were used, and anomalous dispersion corrections¹¹ were applied. Anisotropic thermal parameters were applied only to the uranium atom. Hydrogen atoms were neither located nor included. The discrepancy indices for 2542 data where $I > 3\sigma$ are

$$R = \sum ||F_o| - |F_c|| / \sum |F_o| = 0.048$$

$$R_w = [\sum w(|F_o| - |F_c|)^2 / \sum w |F_o|^2]^{1/2} = 0.055$$

R for all 4622 data is 0.11. The error in an observation of unit weight is 1.29. In the last cycle no parameter changed more than 0.06 σ . The largest peak in the final difference Fourier was 1.5 electrons and seems to be an anisotropy associated with a sulfur atom.

RESULTS AND DISCUSSION

Atomic parameters, distances, and angles are listed in Tables I-III.

The structure is a salt consisting of $(C_2H_5O)UO_2(SOCN(C_2H_5)_2)_2$ anion and diethyl ammonium cation. The nitrogen atom of the cation, N(3), hydrogen bonds to the ethoxide oxygen atom, O(3), of one anion and to the uranyl oxygen atom, O(4), of another anion across the center of symmetry, to form a dimer of two formula units about the origin.

The uranium atom is at the center of a pentagonal bipyramid and is heptacoordinate. The two uranyl oxygen atoms are at the apices of the bipyramid, and two sulfur and three oxygen atoms form an irregular pentagon in a plane about the uranium atom. Pentagonal bipyramidal type coordination is also found in such structures as $UO_2SO_4 \cdot 3\frac{1}{2}H_2O$,¹² $UO_2(H_2O)(CO(NH_2)_2)_4$,¹³ $(NO_3)_2$,¹³ and various uranyl fluorides.¹⁴⁻¹⁶

The two sulfur atoms are adjacent to each other, see Fig. 1. The U-S distance averages 2.866 Å and compares with an average value of 2.80 Å found in the uranyl tris-diethyl dithiocarbamate anion,¹⁷ and an average value of 2.84 Å found in the triphenylphospine oxide and triphenylarsine oxide adducts of uranyl diethyldithiocarbamate.¹⁸

Three types of U-O distances are found in this structure; they are the uranyl, ethoxide, and carbamate-type bonds with distances of 1.78 Å, 2.20 Å and 2.39 Å, respectively.

Supplementary Material Available: Data processing formulas and the listing of structure factor amplitudes (19 pages). Ordering information is given on any current masthead page.

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Table I. Positional and Thermal Parameters with Estimated Deviations^a
for $(C_2H_5)_2NH_2^+ [UO_2((C_2H_5)_2NCOS)_2(OC_2H_5)]^-$.

Atom	x	y	z	B(Å ²)
U	.09224(5)	.19283(4)	.408256(2)	b
S(1)	.3101(4)	.2909(3)	.4779(2)	5.38(8)
S(2)	.3500(4)	.1083(3)	.3623(3)	5.25(8)
O(1)	.0402(9)	.3059(8)	.4848(4)	4.6(2)
O(2)	.097(1)	.0705(9)	.3217(4)	6.0(2)
O(3)	-.1374(8)	.1839(7)	.3832(4)	4.4(2)
O(4)	.0808(8)	.0819(7)	.4527(4)	4.4(2)
O(5)	.096(1)	.3038(8)	.3536(4)	5.5(2)
N(1)	.162(1)	.406(1)	.5535(5)	5.6(3)
N(2)	.254(1)	-.034(1)	.2800(6)	6.8(3)
N(3)	-.237(1)	.049(9)	.4590(5)	4.4(2)
C(1)	.160(1)	.336(1)	.5083(6)	4.3(3)
C(2)	.223(2)	.043(1)	.3166(7)	5.3(3)
C(3)	-.234(2)	.239(1)	.3450(8)	6.3(4)
C(4)	-.248(2)	.172(2)	.2895(9)	8.7(5)
C(5)	.301(2)	.447(1)	.5824(7)	6.6(4)
C(6)	.328(2)	.555(2)	.546(1)	9.9(6)
C(7)	.031(2)	.446(1)	.5769(7)	6.3(4)
C(8)	-.007(2)	.376(2)	.630(1)	8.8(5)
C(9)	.403(2)	-.070(2)	.2716(8)	7.5(4)
C(10)	.431(2)	-.175(2)	.302(1)	9.6(6)
C(11)	.130(2)	-.105(2)	.247(1)	9.7(6)

Table I. (Continued)

C(12)	.113(3)	-.042(2)	.195(1)	13.6(8)
C(13)	-.302(2)	-.050(1)	.4206(7)	6.3(4)
C(14)	-.195(2)	-.103(2)	.3871(8)	7.8(5)
C(15)	-.338(2)	.094(1)	.4963(7)	6.0(4)
C(16)	-.263(2)	.177(2)	.5363(8)	7.3(4)

^aHere and in the following tables the numbers in parenthesis are the estimated standard deviations for the least significant figures.

^bThe anisotropic temperature factor for U has the form $\exp(-0.25(B_{11}h^2a^*{}^2 + 2B_{12}hka^*b^* + \dots))$, with $B_{11} = 3.64(2)$, $B_{12} = -.12(3)$, $B_{13} = .42(1)$, $B_{22} = 3.62(2)$, $B_{23} = .54(3)$ and $B_{33} = 3.41(2)$.

Table II. Distances (\AA)

U	-O(1)	2.40(1)	C(5) -N(1)	1.52(2)
	-O(2)	2.38(1)	C(7) -N(1)	1.48(2)
	-O(3)	2.20(1)	C(9) -N(2)	1.52(2)
	-O(4)	1.79(1)	C(11)-N(2)	1.62(3)
	-O(5)	1.77(1)	C(13)-N93	1.47(2)
	-S(1)	2.863(4)	C(15)-N(3)	1.52(2)
	-S(2)	2.869(4)	C(5) -C(6)	1.61(3)
S(1)	-C(1)	1.72(2)	C(7) -C(8)	1.54(3)
S(2)	-C(2)	1.74(2)	C(9) -C(10)	1.50(3)
O(1)	-C(1)	1.28(2)	C(11)-C(12)	1.40(3)
O(2)	-C(2)	1.27(2)	C(13)-C(14)	1.46(3)
O(3)	-C(3)	1.40(2)	C(15)-C(16)	1.52(3)
N(1)	-C(1)	1.33(2)	N(3) -O(3)	2.68(2)
N(2)	-C(2)	1.32(2)	N(3) -O(4) ^a	2.85(2)

^a Atom at -x, -y, -z

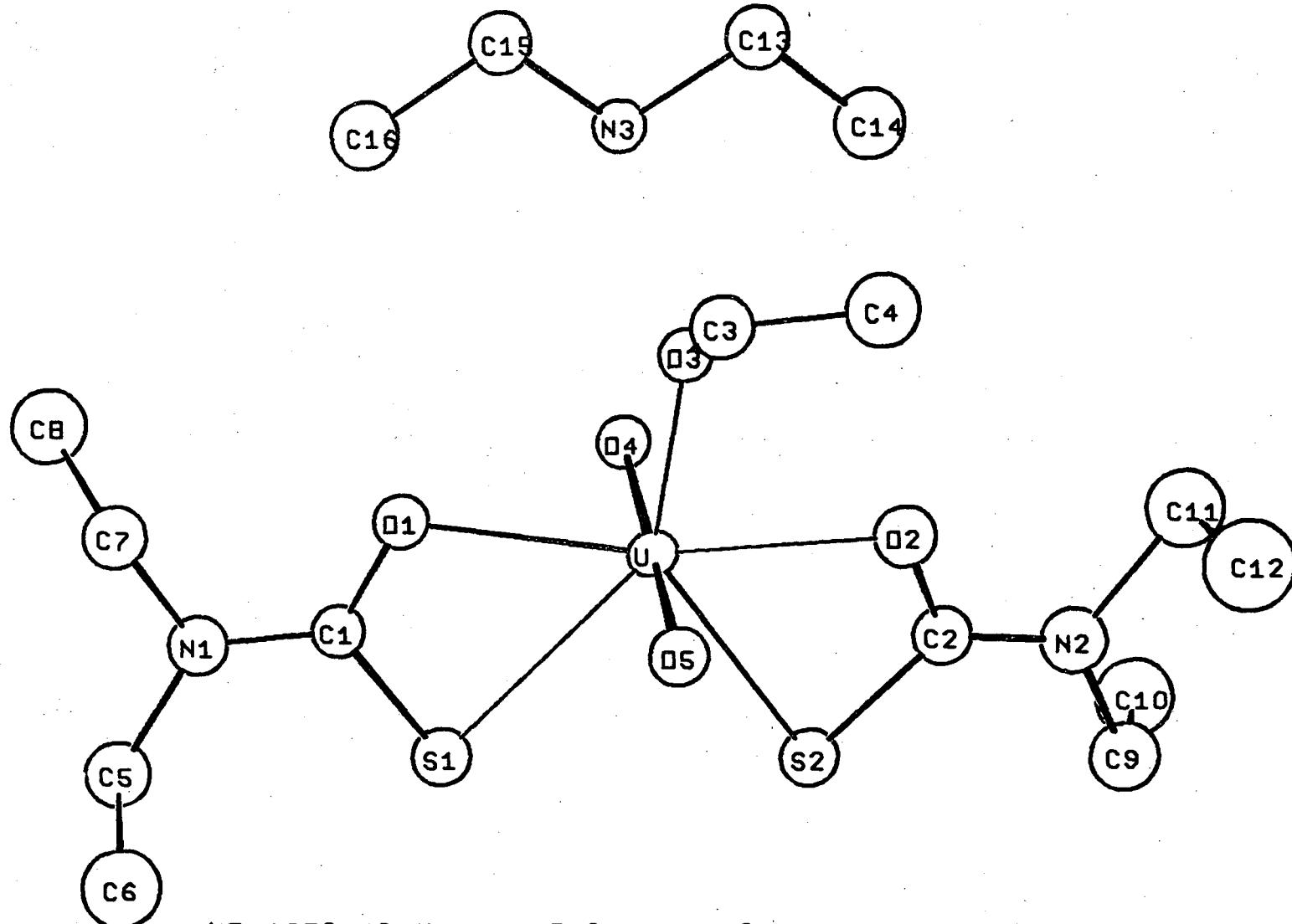
Table III. Selected Angles (deg)

O(4)-U-O(5)	177.4(4)	O(2)-U	-S(2)	57.6(3)
O(4)-U-O(1)	86.8(4)	S(2)-U	-S(1)	75.1(1)
O(2)	89.6(4)	S(1)-U	-O(1)	58.1(2)
O(3)	89.1(4)	O(1)-C(1)-S(1)		119(1)
S(1)	91.6(3)	O(2)-C(2)-S(2)		116(1)
S(2)	90.2(3)	C(1)-N(1)-C(5)		121(1)
O(5)-U-O(1)	91.9(4)	C(1)-N(1)-C(7)		121(1)
-O(2)	91.3(4)	C(5)-N(1)-C(7)		118(1)
-O(3)	88.6(4)	C(2)-N(2)-C(9)		123(2)
-S(1)	89.6(3)	C(2)-N(2)-C(11)		120(1)
-S(2)	92.3(3)	C(9)-N(2)-C(11)		117(2)
O(1)-U-O(3)	86.0(3)	C(13)-N(3)-C(15)		114(1)
O(3)-U-O(2)	83.4(3)	O(3)-N(3)-O(4) ^a		127(1)

^a Atom at -x, -y, -z.

Figure Captions

Figure 1. ORTEP view of the structure.



XBL 782-7161

Fig. 1

Supplementary materials for the paper:

Structure of Diethylammonium

Ethoxybis (diethylmonothiocarbamate)

dioxouranate(VI), $(C_2H_5)_2NH_2^+$

$[UO_2((C_2H_5)_2NCOS)_2OC_2H_5]^-$

by Dale L. Perry, David H. Templeton, and Allan Zalkin

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

t_c = scan count time

S = scatter

t_b = background count time

a = average

B_1 = individual background count

q = additional uncertainty that
affects the weak intensities

$\sigma(B)$ = estimated standard dev-
iation of the total back-
ground count

p = estimate of non-statistical
errors

F = structure factor

wtg = weighting factors in least
squares

D = decay correction; an empir-
ically applied correction
obtained from the fluctuations
of the standard reflections.

A = absorption correction

Lp = Lorentz and polarization
corrections

OBSERVED STRUCTURE FACTORS, STANDARD DEVIATIONS, AND DIFFERENCES (ALL X 3.0)
 UO2(SOCN(C2H5)2)2(O(C2H5))-(C2H5)2NH2+. F(0,0,0) = 3250

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
H,K=	0,	0		12	210	6	-1	12	120	6	14	19	158	10	-20
4	534	14	-28	13	224	6	12	13	409	12	6	20	119	11	2
6	482	12	6	14	217	6	-5	14	63	10	4	21	25	45	-4*
8	223	6	-6	15	0	34	-15*	15	80	11	18	22	29	58	6*
10	543	14	-32	16	333	9	2	16	92	9	-32	23	102	12	-16
12	177	7	7	17	192	6	-7	17	335	11	2	24	97	13	36
14	278	8	-15	18	63	14	38*	18	16	51	-7*	H,K=	0,	7	11
16	372	10	-14	19	169	7	-8	19	190	7	-7	1	200	7	-12
18	30	37	-11*	20	214	9	18	20	9	41	4*	3	152	7	-6
20	259	8	-3	21	28	46	-3*	21	90	18	6*	4	280	9	-4
22	181	7	5	22	67	16	10*	22	26	54	20*	5	326	10	16
24	116	15	0	23	163	13	-1	23	184	12	13	6	183	8	2
26	167	9	4	24	88	14	-10	24	23	47	16*	7	158	6	-4
H,K=	0,	1		25	55	27	-7*	25	81	24	26*	8	340	11	-2
2	983	26	-130	26	118	11	-8	H,K=	0,	5	9	153	6	3	19
3	355	9	-24	H,K=	0,	3		2	114	5	-3	10	36	39	18*
4	424	11	-15	1	527	13	39	3	245	8	1	11	220	10	-3
5	165	5	-10	2	476	13	44	4	120	6	-3	13	24	43	15*
6	398	10	-13	3	430	13	14	6	195	7	-12	14	179	7	12
7	117	4	10	4	398	10	-10	8	288	9	-38	15	141	14	-27
8	401	10	7	5	843	22	-36	10	0	32	-6*	16	140	11	-7
9	235	6	19	6	224	6	27	11	432	14	-5	17	43	50	-16*
10	74	5	-1	7	401	10	33	12	0	45	-22*	18	188	11	-4
11	98	6	-2	8	432	11	-9	13	51	14	-41*	19	54	46	-28*
12	497	13	-13	9	410	11	0	14	62	17	-17*	20	37	44	23*
13	84	6	-2	10	0	36	-9*	16	0	56	-14*	21	113	13	-20
14	392	10	-9	11	421	11	5	17	111	9	-26	22	108	12	-12
15	173	6	3	12	210	8	-16	18	69	13	14*	23	77	19	30*
16	84	10	8	13	103	6	-11	19	195	7	4	H,K=	0,	8	11
17	25	56	-20*	14	292	8	-10	20	0	43	-10*	1	90	12	-6
18	319	9	6	15	327	10	-1	21	197	8	-1	3	121	12	-6
19	41	54	-24*	16	0	50	-10*	22	11	67	-25*	4	259	16	0
20	83	11	-1	17	170	6	9	23	25	46	4*	5	0	36	-18*
21	114	15	-3	18	146	10	13	24	25	56	10*	7	103	14	-1
22	195	9	2	19	180	7	-2	25	110	12	6	8	36	39	4*
23	31	44	-2*	20	39	50	26*	H,K=	0,	6	9	97	8	-10	18
24	153	11	-11	21	208	9	-9	0	212	10	0	11	13	38	-28*
25	72	38	11*	22	84	16	8*	1	222	7	2	12	127	12	-25
26	0	48	-40*	23	61	24	46*	2	95	5	-1	13	0	45	-16*
H,K=	0,	2		24	62	66	9*	4	217	8	9	14	208	16	-12
516	13	-22		25	123	10	3	5	33	18	-10*	15	0	49	-25*
1	431	12	-20	26	46	48	40*	6	220	7	-7	16	219	14	-15
2	340	10	-34	H,K=	0,	4		8	134	6	12	17	34	44	-18*
3	825	25	-8	0	24	27	-20*	10	317	15	-41	18	18	44	0*
4	452	13	-8	1	369	10	-1	11	90	10	5	19	51	29	-27*
5	171	6	10	2	52	6	0	12	95	15	15	20	142	13	-13
6	232	6	-6	4	44	16	4*	13	339	11	-9	21	47	49	25*
7	431	11	4	5	25	30	18*	14	157	8	4	22	90	17	11*
8	354	9	-4	6	61	9	-9	15	16	47	-9*	H,K=	0,	9	11
9	383	8	-6	8	97	6	-22	16	168	8	1	1	46	20	2*
10	521	13	6	10	117	5	-3	17	234	9	-11	3	41	21	27*
11	122	6	-4	11	220	8	-8	18	36	42	6*	4	258	13	-5

STRUCTURE FACTORS CONTINUED FOR
UO2(SOCN(C2H5)2)2(O(C2H5))-(C2H5)2NH2⁺.

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L	F0B	SG	DEL	L	F0B	SG	DEL	L	F0B	SG	DEL	L	F0B	SG	DEL
15	102	13	-21	-1	385	10	34	16	107	11	-38	18	139	10	-19
16	63	21	43*	11216	31-137	17	140	9	10	19	0	69	-2*	21	0
17	76	17	32*	3	65	4	27	18	0	47	-24*	20	152	14	24
H,K=	0,	12	5	836	32	-15	19	228	11	-9	21	197	12	12	23
0	127	19	2	7	373	19	-38	20	32	51	-10*	22	29	60	11*
1	127	12	-8	9	241	13	-11	21	86	20	23*	23	74	27	-10*
2	57	25	7*	11	635	36	-36	22	52	56	-24*	24	105	19	-14
3	284	10	-21	13	239	23	1	23	182	11	14	25	81	54	15*-25
4	75	14	12	15	270	14	12	24	0	81	-33*	26	0	62	-47*-24
5	3	47	-1*	17	230	14	0	25	143	15	-15	H,K=	1,	3	-23
6	56	22	-18*	19	41	48	6*	26	20	69	-34*-26	72	39	-21*-22	222
7	181	14	-22	21	209	14	-10	H,K=	1,	2	-25	58	65	57*-21	0
8	0	45	-8*	23	164	11	4	-26	80	29	2*-24	163	12	5	-20
9	125	9	17	25	97	21	4*-25	125	16	-2	-23	51	88	-30*-19	43
10	42	54	-29*	H,K=	1,	1	-24	0	76	-38*-22	0	82	-11*-18	233	9
11	73	17	-14*-26	37	60	8*-23	92	19	23*	-21	0	54	-68*-17	0	67
12	26	48	-25*-25	47	59	-16*-22	185	10	7	-20	255	9	8	-16	302
13	135	14	6	-24	82	25	-8*-21	140	14	-2	-19	51	44	-18*-15	7
14	53	54	30*-23	164	12	-4	-20	42	74	-24*-18	196	9	-19	-14	123
15	38	49	22*-22	61	46	49*-19	240	9	-7	-17	133	31	-15*-13	47	69
H,K=	0,	13	-21	229	12	23	-18	203	13	2	-16	213	16	11	-12
1	152	10	-14	-20	131	11	-2	-17	0	61	-38*-15	77	14	4	-11
2	30	47	26*-19	158	9	4	-16	255	10	-9	-14	401	20	5	-18
3	50	54	-17*-17	408	21	-13	-15	340	20	-5	-13	152	17	10	-9
4	55	24	35*-16	42	51	-39*-14	0	49	-43*-12	0	40	-11*	8	584	16
5	194	14	-8	-15	118	9	-11	-13	234	9	-15	-11	213	13	-2
6	3	46	-39*-14	248	16	-12	-12	375	18	-9	-10	553	27	5	-6
7	93	14	24	-13	419	23	-11	-11	183	15	3	-9	107	8	-9
8	0	48	-11*-12	42	27	-7*-10	58	12	-22*	-8	350	17	0	-4	94
9	124	12	-6	-11	510	21	-8	-9	503	25	13	-7	394	15	-6
10	41	54	30*-10	244	14	5	-8	402	18	-14	-6	497	19	68	-2
11	122	12	-8	-9	190	6	9	-7	45	12	-27*	-5	65	8	-5
12	28	61	11*	-8	36	16	2*	-6	246	10	-12	-4	743	26	-29
H,K=	0,	14	-7	479	14	-32	-5	799	27	4	-3	718	24	40	1
1	58	-73*	-6	220	6	2	-4	305	10	48	-2	82	6	12	2
2	98	14	12	-5	430	11	38	-3	890	25	42	-1	376	13	24
3	49	39	45*	-4	181	6	15	-2	623	18	57	0	427	14	5
3	131	10	-10	-3	650	17	3	-1	477	16	20	1	251	7	43
4	47	49	-20*	-2	292	8	8	0	50	6	-12	2	466	17	-6
5	14	57	9*	-110	45	27	-44	1	551	21	13	3	128	5	-12
6	0	49	-35*	0	190	5	-2	2	580	30	-18	4	129	5	1
7	145	14	3	1	109	4	-16	3	494	34	25	5	103	5	16
8	0	50	-33*	.2	338	18	-10	4	863	66	-56	6	819	23	6
H,K=	1,	3	614	28	-23	5	213	15	-23	7	278	8	-8	11	124
-25	182	15	19	4	84	11	-22	6	198	13	-19	8	161	11	-18
-23	141	13	-2	5	430	36	4	7	236	18	-20	9	313	11	0
-21	212	9	11	6	186	16	-9	8	388	28	-37	10	335	16	-2
-19	354	10	-1	7	422	41	-39	9	266	24	-20	11	49	28	-3*
-17	0	45	-22*	8	186	15	-6	10	238	23	1	12	355	12	4
-15	488	18	-13	9	583	48	-56	11	416	30	-22	13	144	8	9
-13	389	17	-12	10	122	6	-20	12	282	18	-19	14	159	8	7
-11	276	15	2	11	66	10	-9	13	246	16	-38	15	220	16	-12
-9	400	16	-22	12	76	24	5*	14	246	19	-13	16	329	11	-15
-7	27	38	-8*	13	383	31	-30	15	135	12	-12	17	22	59	9*
-5	757	20	2	14	155	8	-19	16	53	23	2*	18	154	10	4
-3	362	8	-31	15	255	17	-15	17	212	23	-21	19	166	24	10
												23	33100	4*	

STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂O(C₂H₅)-(C₂H₅)₂NH₂⁺.

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L	F	O	B	S	G	D	L	F	O	S	G	D	L	F	O	S	G	D	L	F	O	S	G	D
24	169	13	26	-22	173	13	18	-15	83	21	-15*	0	64	20	-20*	17	125	14	0					
25	0	67	-7*-21	0	63	-48*-14	146	11	-23	1	514	14	4	18	87	22	16*							
	H,K=	1,	5	-20	50	59	9*-13	253	9	6	2	100	22	14*	19	0	58	-5*						
-25	94	23	66*-19	141	13	8	-12	41	51	13*	3	99	11	25		H,K=	1,	11						
-24	145	18	5	-18	152	12	1	-11	405	11	-20	4	199	8	-4	-17	119	17	-7					
-23	21	73	6*-17	10	55	-25*-10	291	9	-6	5	309	14	-19	-16	87	41	33*							
-22	6	59	-31*-16	185	10	26	-9	0	48	-9*	6	108	12	8	-15	0	57	-11*						
-21	58	58	-23*-15	174	14	13	-8	214	8	11	7	223	8	10	-14	124	23	-23*						
-20	205	20	-2	-14	93	40	25*	-7	405	11	21	8	98	21	12*-13	141	17	14						
-19	0	54	-33*-13	142	10	16	-6	129	9	5	9	79	18	-5*-12	76	27	49*							
-18	146	11	-11	-12	429	11	4	-5	238	7	16	10	86	17	7*-11	106	14	11						
-17	75	20	9*-11	135	10	14	-4	290	8	16	11	326	10	-2	-10	144	10	6						
-16	150	10	2	-10	153	9	-17	-3	365	10	4	12	45	53	-21*	-9	68	22	11*					
-15	32	49	-13*	-9	389	10	6	-2	61	17	24*	13	145	12	-21	-8	70	74	-23*					
-14	380	12	27	-8	449	12	14	-1	455	12	12	14	0	56	-62*	-7	160	10	15					
-13	54	27	-48*	-7	142	8	12	0	304	10	2	15	164	15	4	-6	130	11	6					
-12	77	14	-7	-6	468	13	26	1	144	8	-15	16	0	58	-13*	-5	57	67	-13*					
-11	73	15	27*	-5	324	9	8	2	260	8	4	17	224	10	21	-4	226	11	-18					
-10	563	15	12	-4	84	10	14	3	419	11	22	18	0	61	-45*	-3	123	11	2					
-9	0	42	-1*	-3	301	8	9	4	67	34	-34*	19	75	29	52*	-2	55	29	-9*					
-8	571	15	-11	-2	512	14	24	5	138	8	5	20	57	63	-2*	0	163	9	1					
-7	76	15	19*	-1	174	6	-5	6	253	8	6	21	172	21	8	1	0	54	-56*					
-6	287	8	1	0	64	14	4*	7	260	8	0	22	0	67	-31*	2	155	9	-8					
-5	41	48	6*	1	327	9	15	8	186	8	-12		H,K=	1,	10	3	169	21	-18					
-4	683	18	14	2	440	12	14	9	258	8	-4	-15	212	10	-14	4	76	17	23*					
-3	162	6	18	3	144	7	4	10	96	21	5*-14	0	64	-34*	5	118	12	-2						
-2	61	10	3	4	492	13	39	11	114	11	-16	-13	142	11	8	6	171	10	-24					
-1	95	14	21	5	215	7	-4	12	155	19	21	-12	76	49	-24*	7	111	13	-16					
0	554	14	3	6	122	8	14	13	199	9	24	-11	104	14	-21	8	58	50	19*					
1	20	33	16*	7	114	9	2	14	92	17	9*-10	30	50	-29*	9	172	10	-7						
2	362	9	20	8	297	12	4	15	158	14	-13	-9	176	16	-12	10	103	16	-32					
3	123	6	9	9	161	7	18	16	181	10	-8	-8	102	12	-1	11	39	63	26*					
4	295	8	-6	10	284	10	-2	17	50	65	-23*	-7	11	47	0*	12	105	20	-3*					
5	48	16	-22*	11	200	7	-5	18	72	31	-30*	-6	124	10	1	13	116	45	-3*					
6	633	19	8	12	118	11	31	19	178	12	6	-5	277	14	3	14	0	56	-47*					
7	171	7	5	13	128	11	2	20	70	64	30*	-4	51	29	19*	15	113	16	9					
8	285	10	-3	14	300	15	-2	21	37	61	16*	-3	254	9	-10	16	123	21	10					
9	138	7	-18	15	95	38	-16*	22	95108	0*	-2	172	8	-11	17	49	57	41*						
10	274	18	5	16	0	52	-27*	23	117	21	-6	-1	104	15	11		H,K=	1,	12					
11	118	9	5	17	162	10	3		H,K=	1,	8	0	84	14	12	-15	111	22	34*					
12	355	11	-9	18	201	14	2	-16	0	59	-61*	1	326	13	-9	-14	47	60	14*					
13	78	16	15*	19	0	56	-15*-15	231	14	-6	2	120	19	8	-13	50	76	24*						
14	46	-25*	20	166	12	-13	-14	19	56	-49*	3	147	9	-3	-12	158	12	-10						
15	46	49	-9*	21	94	21	-21*	-13	207	10	-22	4	115	11	16	-11	55	55	12*					
16	357	10	8	22	0	64	-19*-12	42	53	-12*	5	194	9	-22	-18	38	56	-28*						
17	58	64	15*	23	0	63	-28*-11	151	10	-1	6	20	47	14*	-9	55	47	-4*						
18	156	11	-21	24	120	23	8*-10	68	22	60*	7	217	12	-3	-8	140	11	3						
19	105	32	24*	H,K=	1,	7	-9	352	10	8	8	95	14	-7	-7	57	69	42*						
20	114	15	-18	-23	92	29	-6*	-8	29	51	-50*	9	100	13	2	-6	170	13	-9					
21	24	81	22*-22	0	64	-38*	-7	0	49	-45*	10	87	24	33*	-5	92	21	14*						
22	180	12	4	-21	121	18	1	-6	66	33	2*	11	215	19	-9	-4	34	51	28*					
23	19	62	-8*-20	146	14	13	-5	399	11	19	12	55	62	-3*	-3	104	13	34						
24	81	34	77*-19	0	61	-55*	-4	39	46	29*	13	81	28	-20*	-2	176	15	-8						
	H,K=	1,	6	-18	84	23	9*	-3	329	10	20	14	86	19	-3*	-1	46	50	38*					
-24	98	28	16*-17	197	10	5	-2	74	21	23*	15	67	29	-18*	0	121	12	3						
-23	0	65	-62*-16	105	27	34*	-1	246	8	13	16	44	55	41*	1	100	14	7						

STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂O(C₂H₅)₂NH₂⁺.

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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL					
2	127	11	9	7	0	60	-45*	1	78	5	-7	4	25	28	-32*	7	597	16	1	
3	6	52	-2*	8	132	15	4	2	83	5	12	5	339	9	7	8	234	7	1	
4	187	11	-41	H,K=	2,	0	3	265	7	-15	6	576	15	13	9	180	6	-6		
5	77	47	0*-26	51	60	13*	4	743	19	31	7	137	5	6	10	184	6	-25		
6	6	53	-1*-24	194	11	-4	5	70	13	-2*	8	454	12	-13	11	378	11	2		
7	65	28	-3*-22	117	14	8	6	321	9	-25	9	353	9	-10	12	47	15	-19*		
8	192	10	-15	-20	211	9	-7	7	67	8	-28	10	132	6	15	13	372	11	-18	
9	80	20	53*-18	364	10	-12	8	243	8	-13	11	317	9	-2	14	72	10	9		
10	136	26	26*-16	79	36	-1*	9	241	10	5	12	268	7	-4	15	68	12	4		
11	77	25	-15*-14	455	12	-13	10	574	18	-7	13	219	7	3	16	128	17	-13		
12	66	63	-28*-12	284	8	7	11	134	11	-12	14	148	6	-4	17	288	9	-8		
13	72	35	6*-10	568	15	-6	12	75	11	-23	15	313	9	-3	18	32	41	9*		
14	116	31	-3*	-8	646	17	-15	13	218	7	7	16	162	10	0	19	112	11	-2	
15	6	77	-5*	-6	36	18	25*	14	349	11	-4	17	25	39	19*	20	137	14	-12	
	H,K=	1,	13	-4	907	23	30	15	91	13	2	18	220	12	-11	21	153	8	17	
-12	77	25	73*	-2	639	16	42	16	221	8	3	19	168	9	5	22	43	51	-1*	
-11	6	59	-1*	0	124	4	22	17	143	9	24	20	0	57	-9*	23	148	12	-2	
-10	172	15	9	2	516	14	-39	18	173	10	1	21	118	10	10	24	62	24	-4*	
-9	58	42	46*	4	169	5	24	19	0	51	-17*	22	193	8	5	25	22	63	19*	
-8	136	13	11	6	511	21	-43	20	278	10	-3	23	36	48	-3*	H,K=	2,	4		
-7	6	56	-12*	8	496	28	-28	21	69	38	-3*	24	93	15	3	-25	140	10	12	
-6	71	27	-8*	10	32	35	-25*	22	66	30	-1*	25	78	19	-11*	-24	34	55	-4*	
-5	6	55	-13*	12	531	28	-30	23	48	57	-4*	H,K=	2,	3	-23	88	16	12		
-4	145	13	-17	14	203	7	-27	24	152	13	14	-26	77	23	3*	-22	0	53	-1*	
-3	6	54	-12*	16	264	11	-6	25	0	74	-2*-25	101	14	-9	-21	203	8	-4		
-2	63	30	10*	18	309	19	-2	H,K=	2,	2	-24	0	48	-6*	-20	56	21	-16*		
-1	6	54	-27*	20	0	51	-31*-26	47	60	27*	-23	180	8	13	-19	31	46	7*		
0	131	17	-12	22	216	12	7	-25	97	20	16*-22	111	10	-2	-18	21	44	-9*		
1	6	54	-13*	24	113	17	10	-24	156	12	14	-21	0	48	-5*-17	326	9	-6		
2	146	12	-12	26	81	33	2*-23	0	56	-37*-20	68	16	-4*-16	40	47	15*				
3	55	42	46*	H,K=	2,	1	-22	44	55	-18*-19	237	10	7	-15	324	11	-1			
4	61	73	-7*-26	112	20	-17	-21	140	39	-6*-18	119	11	-16	-14	34	37	23*			
5	6	55	-11*-25	24	59	-29*-20	166	10	-9	-17	181	7	-6	-13	150	6	-8			
6	190	25	-18	-24	52	56	42*-19	70	21	2*-16	165	7	-10	-12	38	45	-18*			
7	6	56	-4*-23	46	57	-34*-18	277	9	10	-15	239	10	-16	-11	501	15	17			
8	5	57	-19*-22	226	10	-3	-17	198	8	5	-14	0	36	-13*-10	68	8	21			
9	6	87	-16*-21	0	54	-7*-16	24	45	8*-13	472	13	-4	-9	229	6	1				
10	106	18	-19	-20	248	9	3	-15	323	10	-6	-12	191	9	-5	-8	93	6	-13	
11	6	71	-40*-19	85	90	-20*-14	327	14	15	-11	27	31	19*	-7	461	13	20			
12	109	19	-10	-18	89	14	8	-13	58	16	-15*-10	196	6	-3	-6	91	9	13		
	H,K=	1,	14	-16	405	11	-1	-12	143	9	0	-9	466	13	1	-5	603	16	11	
-8	110	19	-2	-15	0181	-64*-11	491	13	4	-8	53	9	3	-4	100	6	6			
-7	41	75	11*-13	269	10	7	-10	249	8	-23	-7	256	7	-9	-3	259	7	12		
-6	138	22	10	-12	449	13	-1	-9	178	6	0	-6	426	11	20	-2	176	5	5	
-5	6	57	-15*-11	0	46	-49*	-8	509	13	14	-5	455	18	25	-1	570	15	28		
-4	2	71	-19*-10	458	12	5	-7	506	14	-15	-4	369	10	16	0	58	6	10		
-3	6	57	-21*	-9	278	8	20	-6	95	4	8	-3	531	20	-10	1	393	10	15	
-2	144	16	3	-8	281	9	-9	-5	206	6	10	-2	42	8	-11*	2	232	6	12	
-1	6	57	-13*	-7	33	22	8*	-4	455	17	20	-1	23	36	-10*	3	355	10	16	
1	43	58	-39*	-6	629	16	-13	-3	274	9	38	0	210	6	10	4	13	30	-3*	
1	6	72	-52*	-5	302	8	-5	-2	419	15	6	1	420	11	13	5	689	19	10	
2	89	77	-3*	-4	106	9	-12	-1	451	15	37	2	157	5	1	6	200	7	14	
3	6	58	-11*	-3	100	8	-10	0	291	7	-15	3	494	13	-5	7	103	5	-4	
4	144	13	5	-2	504	13	10	1	266	7	35	4	491	13	20	8	38	15	3*	
5	47	58	-12*	-1	227	6	32	2	539	14	27	5	96	6	27	9	398	11	4	
6	6	58	-3*	0	815	21	46	3	410	10	50	6	186	5	23	10	26	32	-24*	

STRUCTURE FACTORS CONTINUED FOR
 $\text{UO}_2(\text{SO}_4\text{C}_2\text{H}_5)_2(\text{O}(\text{C}_2\text{H}_5)) - (\text{C}_2\text{H}_5)_2\text{NH}_2^+$.

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STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂O(C₂H₅)-(C₂H₅)₂NH₂⁺.

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L	F	O	B	S	G	D	E	L	F	O	B	S	G	D	E	L	F	O	S	G	D	E					
10	68	14	41*	-5	173	8	2	3	101	12	18	-3	389	9	-1	1	258	7	1								
11	58	30	0*	-4	103	10	12	4	63	32	43*	-2	328	9	1	2	238	7	-6								
12	204	7	-3	-3	57	41	12*	5	134	14	9	-1	666	17	11	3	548	14	1								
13	73	17	18*	-2	62	29	-6*	6	49	50	26*	0	130	5	21	4	161	5	-7								
14	107	10	10	-1	171	8	-3	7	44	73	38*	1	741	19	11	5	133	5	4								
15	57	23	1*	0	16	43	1*	H,K=	3,	0	2	332	9	-5	6	153	6	-1									
16	109	11	-5	1	85	14	-4	-25	79	24	5*	3	143	5	-4	7	359	9	-6								
17	53	28	36*	2	88	11	14	-23	231	9	5	4	266	8	-2	8	36	29	7*								
18	146	10	15	3	92	14	1	-21	127	11	6	5	630	16	-37	9	368	11	-7								
			H,K=	2,	11	4	14	43	4*	-19	167	9	-12	6	40	15	4*	10	279	9	7						
-17	94	19	1*	5	173	8	-4	-17	273	8	12	7	390	11	-18	11	75	11	4								
-16	104	13	-17	6	64	19	-8*	-15	6	44	-8*	8	104	7	-2	12	204	7	-13								
-15	63	21	9*	7	37	44	24*	-13	337	10	-11	9	92	13	-11	13	250	10	-3								
-14	0	46	-20*	8	66	24	-11*	-11	311	10	19	10	112	9	3	14	125	9	-1								
-13	139	10	-3	9	156	13	-14	-9	342	9	-10	11	328	9	5	15	124	15	0								
-12	117	13	-6	10	0	59	-6*	-7	646	17	-13	12	91	16	-18	16	284	10	9								
-11	17	44	1*	11	112	12	-6	-5	165	5	7	13	38	41	16*	17	174	9	2								
-10	112	10	-6	12	67	20	2*	-3	568	15	-47	14	155	19	-19	18	0	56	-10*								
-9	138	10	1	13	44	49	-33*	-1	589	16	16	15	344	16	-31	19	177	10	-12								
-8	102	10	6	14	25	65	-30*	1	895	23	39	17	273	14	-4	20	185	9	6								
-7	78	13	-14	H,K=	2,	13	3	864	22	-23	18	114	12	0	21	0	55	-16*									
-6	207	7	0	-12	67	29	61*	5	178	5	-7	19	128	11	7	22	66	35	-48*								
-5	118	9	5	-11	0	49	-4*	7	331	9	-28	20	0138	-31*	23	106	18	-14									
-4	105	9	7	-10	4	49	-22*	9	362	10	-19	21	204	10	-9	24	51	58	7*								
-3	195	7	-6	-9	162	9	-9	11	38	16	-10*	22	65	38	-5*	25	47	79	5*								
-2	115	8	1	-8	24	48	-2*	13	457	13	-12	23	79	35	54*	H,K=	3,	3									
-1	0	41	-22*	-7	98	15	-20	15	172	8	-10	24	53	58	-2*-25	53	59	-24*									
0	118	8	4	-6	0	48	-31*	17	302	8	-18	25	139	15	15	-24	120	16	8								
1	158	9	5	-5	109	11	1	19	341	10	-5	H,K=	3,	2	-23	0	56	-31*									
2	0	47	-11*	-4	59	34	21*	21	21	47	-1*-26	119	16	14	-22	157	11	20									
3	119	8	-10	-3	180	18	16	23	198	8	9	-25	0	58	-50*	-21	85	20	-13*								
4	177	7	13	-2	29	45	9*	25	81	17	12*-24	70	52	1*	-20	0	51	-51*									
5	33	44	-6*	-1	61	24	19*	H,K=	3,	1	-23	196	14	15	-19	127	16	8									
6	189	9	-14	0	46	57	44*-26	23	58	12*-22	96	16	20	-18	260	9	-2										
7	173	9	-10	1	118	16	1	-25	141	14	-5	-21	103	14	-11	-17	37	57	-34*								
8	79	16	-7*	2	26	68	1*	-24	46	56	-8*-20	132	11	-5	-16	164	12	-5									
9	84	12	8	3	108	11	-14	-23	0	54	-19*-19	148	10	7	-15	138	9	11									
10	149	10	-18	4	0	46	-19*-22	0	61	-42*-18	29	47	-2*-14	175	8	-3											
11	82	14	-20	5	54	54	3*-21	253	9	-3	-17	220	8	2	-13	125	14	-10									
12	84	13	32	6	17	51	14*-20	48	68	-2*-16	176	8	-16	-12	385	10	-12										
13	100	12	-2	7	183	8	11	-19	213	15	-20	-15	121	9	-9	-11	279	12	-8								
14	101	14	0	8	0	56	-9*-18	119	11	-5	-14	291	8	-1	-10	54	15	4*									
15	13	57	-33*	9	62	23	-10*	-17	118	11	13	-13	369	10	6	-9	198	6	16								
16	106	12	20	10	25	48	12*-16	104	11	-9	-12	61	14	3*	-8	513	14	6									
17	119	12	9	11	108	13	-4	-15	319	9	-5	-11	179	6	-6	-7	47	16	28*								
			H,K=	2,	12	H,K=	2,	14	-14	37	56	14*-10	311	8	4	-6	346	11	30								
-15	117	12	-7	-7	122	14	14	-13	47	20	7*	-9	283	8	-2	-5	255	8	-16								
-14	13	49	-40*	-6	31	49	26*-12	166	6	4	-8	50	24	5*	-4	177	7	-23									
-13	64	21	24*	-5	101	16	-15	-11	423	13	-7	-7	574	19	11	-3	195	6	-5								
-12	58	28	56*	-4	25	48	-9*-10	6	36	-49*	-6	533	19	8	-2	621	16	12									
-11	192	8	7	-3	36	49	5*	-9	529	15	-3	-5	340	10	23	-1	96	6	3								
-10	57	24	-16*	-2	27	51	14*	-8	201	10	-2	-4	499	16	23	0	137	5	4								
-9	40	53	-30*	-1	159	9	20	-7	8	47	-28*	-3	255	8	6	1	296	8	13								
-8	94	12	-8	0	26	48	22*	-6	148	7	-5	-2	276	8	40	2	475	12	4								
-7	168	8	1	1	84	15	12	-5	496	14	3	-1	443	13	13	3	50	13	-16*								
-6	54	43	49*	2	0	49	-33*	-4	230	7	0	0	531	15	19	4	287	8	2								

STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂O(C₂H₅)-(C₂H₅)₂NH₂⁺.

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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL					
5	434	11	3	10	580	15	-5	16	51	68	9*-22	40	58	-17*-11	145	9	1			
6	102	7	-26	11	6	43	-33*	17	43	72	-10*-21	137	13	1	-10	93	13	1		
7	171	6	-7	12	353	10	6	18	223	12	14	-20	0	56	-63*	-9	181	8	-7	
8	623	16	-2	13	6	45	-46*	19	59	33	34*-19	149	12	-11	-8	0	46	-19*		
9	246	7	-10	14	154	9	16	20	63	33	-14*-18	123	18	-30	-7	274	8	-1		
10	189	7	-1	15	0	47	-6*	21	41	56	-2*-17	78	21	-7*	-6	144	8	19		
11	229	7	8	16	257	12	7	22	70	33	-32*-16	110	13	18	-5	54	33	7*		
12	332	10	-1	17	6	64	-19*	23	0	62	-19*-15	215	9	-11	-4	135	8	-7		
13	48	25	38*	18	19	54	6*	H,K= 3,	6	-14	119	12	-3	-3	273	8	13			
14	329	12	7	19	0	56	-30*	-23	113	37	20*-13	51	32	12*	-2	66	25	-15*		
15	196	8	9	20	246	10	14	-22	64	36	-13*-12	207	8	12	-1	279	8	-7		
16	47	4	-33*	21	0	56	-29*-21	110	15	24	-11	229	8	-4	0	124	12	-4		
17	118	12	-9	22	132	13	14	-20	172	11	-3	-10	0	45	-5*	1	217	8	10	
18	234	11	-2	23	0	61	-6*-19	122	14	40	-9	261	8	-11	2	48	61	8*		
19	0	52	-24*	24	38	79	-24*-18	12	52	4*	-8	182	13	-8	3	455	12	2		
20	89	16	29*	H,K= 3,	5	-17	100	15	-31	-7	39	58	3*	4	29	44	-12*			
21	86	21	-13*-24	79	29	-16*-16	278	9	-5	-6	55	20	2*	5	134	9	-3			
22	134	14	-14	-23	58	68	32*-15	59	65	7*	-5	288	8	6	6	46	36	30*		
23	0	79	-29*-22	167	11	9	-14	260	8	8	-4	229	7	8	7	302	10	3		
24	117	19	-19	-21	11	55	-10*-13	189	10	-18	-3	209	7	13	8	0	76	-19*		
	H,K= 3,	4	-20	44	58	-2*-12	63	19	0*	-2	376	12	12	9	267	13	-5			
-25	41	58	28*-19	0	51	-35*-11	143	8	-15	-1	201	9	8	10	81	16	13*			
-24	124	38	3*-18	285	13	-8	-10	244	8	9	0	128	8	3	11	103	24	-5*		
-23	71	26	35*-17	6	49	-8*	-9	75	31	-28*	1	414	11	-25	12	77	19	-17*		
-22	112	15	36	-16	132	11	-6	-8	22	54	1*	2	201	7	5	13	270	9	6	
-21	63	28	32*-15	54	27	14*	-7	225	7	4	3	53	20	-24*	14	0	52	-4*		
-20	209	9	4	-14	261	8	-16	-6	343	13	6	4	184	8	5	15	62	29	-3*	
-19	47	53	-13*-13	0	46	-15*	-5	73	13	6	5	340	9	2	16	41	53	-11*		
-18	0	51	-12*-12	368	12	-6	-4	319	9	23	6	80	17	17*	17	152	12	-7		
-17	0	69	-54*-11	33	42	-18*	-3	212	8	18	7	236	8	-1	18	61	35	26*		
-16	360	10	-3	-10	40	40	2*	-2	12	37	-2*	8	220	8	-7	19	158	23	12	
-15	70	84	-7*	-9	83	11	-19	-1	216	7	7	9	208	8	-7	20	0	66	-34*	
-14	348	10	-13	-8	421	11	-11	0	451	12	18	10	109	11	8	H,K= 3,	9			
-13	80	23	-14*	-7	42	27	37*	1	46	19	26*	11	223	8	6	-20	70	31	39*	
-12	96	12	-9	-6	216	7	-2	2	370	10	6	12	138	10	7	-19	133	14	12	
-11	63	15	-8*	-5	150	6	8	3	266	8	8	13	37	62	-3*	-18	25	56	5*	
-10	428	12	5	-4	341	9	25	4	191	7	8	14	154	12	-9	-17	75	26	10*	
-9	97	9	32	-3	0	37	-20*	5	0	40	-53*	15	222	9	-1	-16	60	72	29*	
-8	158	8	16	-2	596	16	21	6	382	10	-8	16	0	53	-16*	-15	205	10	10	
-7	44	19	5*	-1	95	7	0	7	275	11	-3	17	82	21	-31*	-14	16	52	10*	
-6	451	12	-3	0	306	9	12	8	62	17	-2*	18	84	21	-13*	-13	47	51	-3*	
-5	15	35	-43*	1	39	22	-5*	9	269	8	19	19	92	19	18*	-12	0	50	-8*	
-4	541	14	-11	2	259	7	5	10	392	12	-9	20	71	29	23*	-11	241	9	-7	
-3	0	33	-26*	3	52	13	49*	11	88	13	-1	21	59	91	-47*	-18	0	49	-20*	
-2	0	38	-18*	4	382	10	-7	12	212	9	-1	22	56	60	6*	-9	254	9	10	
-1	51	12	14*	5	147	7	14	13	149	9	-12	H,K= 3,	8	-8	0	48	-46*			
1	534	14	1	6	241	7	-5	14	126	18	-17	-21	82	25	-5*	-7	59	23	20*	
2	34	57	28*	7	50	19	18*	15	44	49	1*	-20	5	66	-20*	-6	0	47	-22*	
3	360	9	8	8	552	14	-15	16	209	12	2	-19	87	26	-37*	-5	286	9	-16	
4	250	7	-1	9	151	8	1	17	108	20	16	-18	0	63	-30*	-4	64	19	-6*	
5	255	9	-9	10	148	14	-3	18	0	53	-9*-17	203	11	11	-3	117	11	-9		
6	635	16	8	12	350	14	-4	20	102	18	-23	-15	32	51	-3*	-1	280	10	0	
7	113	9	-12	13	0	46	-4*	21	0	59	-30*-14	55	34	-13*	0	57	24	20*		
8	30	39	-26*	14	275	9	0	22	102	20	1*	-13	261	9	14	1	333	11	10	
9	73	12	7	15	105	19	20	H,K= 3,	7	-12	45	48	9*	2	53	25	14*			

STRUCTURE FACTORS CONTINUED FOR $UO_2(SOCl(C_2H_5)_2)_2(O(C_2H_5))-(C_2H_5)_2NH_2^+$.

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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
3	8	47	-59*-15	83	24	-6*	9	54	63	5*	8	328	9	5	21	34116	-11*		
4	98	13	9 -14	68	29	22*	10	139	13	1	18	160	5	-12	22	153	9	9	
5	348	10	4 -13	17	55	14*	11	0	57	-2*	12	164	6	-10	23	24	58	-13*	
6	38	47	29*-12	115	16	-20	12	35	64	-52*	14	371	11	14	24	46	48	-35*	
7	196	8	-2 -11	130	13	6	13	71	34	17*	16	45	25	-37*	H,K=	4,	2		
8	19	48	-17*-10	0	54	-22*	H,K=	3,	13	18	194	7	6	-25	100	13	-3		
9	118	11	8 -9	138	12	-20	-11	44	59	6*	20	198	8	3 -24	31	52	-7*		
10	8	57	-19*-8	153	11	-7	-10	65	78	48*	22	40	48	8*-23	55	27	-26*		
11	229	9	-9 -7	17	54	-26*	-9	49	59	46*	24	177	15	14	-22	167	9	2	
12	8	58	-43*	-6	116	21	-13	-8	167	11	16	H,K=	4,	1	-21	58116	-46*		
13	53	60	48*	-5	177	9	-4	-7	0	57	-10*-25	51	34	26*-20	54	40	-26*		
14	1	53	-16*	-4	66	23	11*	-6	106	17	-9	-24	183	8	3 -19	187	7	6	
15	172	11	-19 -3	55	32	1*	-5	74	25	67*-23	37	46	-13*-18	133	8	1			
16	36	56	-12*	-2	155	10	-8	-4	98	19	-18*-22	35	44	14*-17	40	44	-6*		
17	116	31	-14*	-1	149	10	1	-3	0	64	-7*-21	57	22	0*-16	180	7	10		
18	8	78	-16*	0	0	50	-8*	-2	191	10	14	-20	228	8	6 -15	172	8	-8	
19	8	60	-62*	1	117	14	-8	-1	8	55	-12*-19	47	51	-15*-14	123	7	-7		
	H,K=	3,	18	2	181	18	8	0	0	56	-37*-18	161	7	16	-13	214	7	-11	
-18	73	34	35*	3	0	51	-50*	1	54	55	48*-17	110	8	-17	-12	375	10	-1	
-17	125	14	1*	4	141	11	18	2	144	12	18	-16	190	8	8 -11	15	36	-7*	
-16	27	57	-19*	5	173	13	8	3	0	56	-1*-15	63	12	-7*-10	262	7	-13		
-15	8	82	-20*	6	52	44	7*	4	122	18	4	-14	329	9	-5	-9	219	6	-3
-14	101	17	16	7	107	14	6	5	0	57	-20*-13	71	17	-10*	-8	213	6	13	
-13	179	10	4	8	165	17	-11	6	79	72	14*-12	81	8	-5	-7	49	10	-3*	
-12	36	54	14*	9	61	32	5*	7	58	63	37*-11	148	6	-3	-6	444	11	0	
-11	118	13	4	10	73	24	16*	8	171	12	18	-10	331	9	-19	-5	302	8	10
-10	102	14	9	11	133	12	26	9	0	59	-14*-9	11	31	-22*	-4	0	28	-4*	
-9	171	9	13	12	97	19	-10*	10	0	84	-57*	-8	445	12	-13	-3	552	14	-4
-8	24	72	-7*	13	0	57	-31*	H,K=	3,	14	-7	108	6	1	-2	535	15	-4	
-7	292	11	-23	14	0	60	-90*	-5	47	49	40*	-6	66	6	11	-1	100	5	3
-6	71	20	16*	15	99	23	3*	-4	124	11	11	-5	277	7	15	0	342	9	13
-5	87	15	-1	16	38	60	-1*	-3	30	49	-28*	-4	578	16	-17	1	488	13	33
-4	94	14	-17	H,K=	3,	12	-2	21	48	-6*	-3	153	5	0	2	307	8	15	
-3	228	8	-4 -14	106	19	-3	-1	66	21	27*	-2	309	8	-9	3	225	6	12	
-2	4	49	-12*-13	62	41	4*	0	136	14	11	-1	340	9	36	4	555	15	-11	
-1	169	9	2 -12	44	57	20*	1	22	49	12*	0	710	18	15	5	332	9	11	
0	124	20	8 -11	25	74	8*	2	83	16	17*	1	37	11	28*	6	202	6	14	
1	148	9	-17 -10	175	11	5	3	47	57	14*	2	730	19	5	7	329	10	-16	
2	74	18	-15*	-9	60	38	-2*	4	95	20	15*	3	340	9	-7	8	271	9	-14
3	282	9	6 -8	57	44	-22*	H,K=	4,	0	4	62	9	8	9	37	38	21*		
4	55	34	-37*	-7	106	16	10	-24	51	32	-9*	5	210	6	-1	10	249	8	3
5	84	17	-13*	-6	163	11	-3	-22	258	8	-2	6	544	14	-12	11	240	8	4
6	126	11	-13	-5	0	66	-6*	-20	130	8	-14	7	188	6	7	12	150	6	-1
7	137	11	0 -4	147	12	-34	-18	215	8	7	8	215	6	6	13	88	9	-20	
8	60	26	44*	-3	22	54	-51*-16	248	7	5	9	187	6	-4	14	331	9	-12	
9	156	10	-1 -2	43	68	2*-14	93	10	17	10	270	8	-14	15	98	12	-5		
10	75	23	-34*	-1	0	53	-12*-12	477	13	-16	11	52	13	-10*	16	135	7	-8	
11	56	-35*	0	183	10	0	-10	418	12	-8	12	335	9	5	17	131	17	-12	
12	51	80	17*	1	77	21	12*	-8	73	9	20	13	63	24	12*	18	97	21	-17*
13	172	12	0	2	102	15	23	-6	514	14	-32	14	13	37	-9*	19	0	55	-10*
14	93	22	8*	3	103	16	-4	-4	78	5	-2	15	29	46	-8*	20	121	11	-4
15	98	29	9*	4	109	15	5	-2	744	20	18	16	292	8	-6	21	151	12	11
16	87	30	28*	5	32	54	4*	0	583	15	37	17	55	27	6*	22	8	47	-10*
17	112	17	17	6	159	11	-2	2	489	13	-11	18	184	7	-20	23	96	14	-7
	H,K=	3,	11	7	54	55	1*	4	775	23	-4	19	68	28	-15*	24	91	15	-3
-16	83	25	3*	8	29	55	23*	6	120	7	22	20	61	20	6*	H,K=	4,	3	

STRUCTURE FACTORS CONTINUED FOR
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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL			
-25	38	59	-19*-18	33	42	2*-10	45	22	13*	-1	37	28	7*	18	157	7 -13		
-24	66	21	-12*-17	48	42	-21* -9	92	9	6	0	117	7	1	11	91	10 -27		
-23	137	9	17 -16	32	55	6* -8	57	12	1*	1	254	7	-10	12	210	7 -15		
-22	62	23	35*-15	256	8	11 -7	561	16	-1	2	85	7	11	13	76	13 -11		
-21	159	8	6 -14	56	15	4* -6	59	16	-3*	3	102	8	-1	14	47	31 45*		
-20	108	9	9 -13	321	9	-5 -5	326	9	2	4	293	8	-9	15	62	18 -27*		
-19	74	13	12 -12	109	9	5 -4	145	6	0	5	264	7	13	16	191	11 3		
-18	102	11	-8 -11	172	6	-6 -3	280	7	-2	6	45	17	3*	17	45	45 3*		
-17	281	8	-1 -10	76	16	-3* -2	139	6	-8	7	403	12	-7	18	92	13 1		
-16	50	38	0* -9	507	14	-8 -1	371	10	6	8	219	8	-7	19	106	12 4		
-15	205	7	0 -8	71	14	2* 0	21	31	7*	9	39	27	16*	20	100	19 21*		
-14	200	7	5 -7	132	5	3 1	92	8	12	10	158	6	-3	H,K*	4,	8		
-13	167	6	25 -6	58	9	9 2	65	11	-3	11	303	8	6	-21	84	35 16*		
-12	20	45	-39*	-5	593	16	10 3	292	9	5	12	67	17	3*	-20	97	13 10	
-11	36	4	8 -5	-4	34	35	25*	4	45	19	16*	13	155	9	-15	-19	72	18 14*
-10	273	10	14 -3	623	17	17 5	383	10	-1	14	179	9	-9	-18	95	15 7		
-9	27	34	13*	-2	0	32 -14*	6	126	6	-1	15	113	13	-7	-17	21	46 3*	
-8	273	8	-11 -1	12	34	-7*	7	188	6	-4	16	52	23	-1*	-16	191	8 -5	
-7	549	16	11 0	95	6	-11 8	19	35	-7*	17	157	8	1	-15	30	54 -17*		
-6	17	30	-14*	1	389	10	-4 9	493	14	-7	18	90	13	3	-14	0	45 -17*	
-5	400	12	-26	2	53	16	19*	18	84	9	-10	19	19	47	-6*	-13	47	25 26*
-4	240	7	2 3	210	6	-2 11	200	8	-6	20	43	48	-20*	-12	279	10 -15		
-3	20	6	-7 4	34	36	-27*	12	10	50	-24*	21	137	11	12	-11	33	52 12*	
-2	100	5	8 5	343	10	6 13	242	7	-3	H,K*	4,	7	-10	190	7 -13			
-1	566	15	10 6	84	7	-7 14	61	15	28*	-22	33	51	0*	-9	37	50 7*		
0	230	7	-10 7	478	13	-10 15	212	7	4	-21	63	22	0*	-8	129	8 -5		
1	157	5	9 8	23	34	13*	16	35	43	-26*	-20	95	21	-9*	-7	48	33 -15*	
2	239	7	13 9	97	7	18 17	100	10	-8	-19	62	27	5*	-6	292	10 4		
3	451	12	-17 10	99	10	21 18	37	56	13*-18	148	8	3	-5	138	7 11			
4	126	5	24 11	466	12	-14 19	205	8	3	-17	129	9	-19	-4	15	45 -24*		
5	298	9	-5 12	0	38	-37*	20	37	64	8*-16	66	16	10*	-3	167	8 -8		
6	112	6	-12 13	273	8	13 21	63	22	9*-15	107	11	9	-2	291	9 -2			
7	276	7	-18 14	120	7	15 22	36	49	5*-14	232	7	-10	-1	57	23 32*			
8	90	7	-6 15	157	7	1 H,K*	4,	6	-13	108	9	2	0	230	7 -13			
9	469	13	-23 16	32	48	-9*-23	83	16	32*	-12	63	14	2*	1	64	13 -21*		
10	160	11	4 17	223	8	9 -22	65	26	-8*	-11	161	8	6	2	170	7 1		
11	168	7	-14 18	5	43	-16*-21	68	27	-20*	-10	259	8	-21	3	51	21 28*		
12	198	7	-2 19	59	21	50*-20	79	15	4*	-9	76	10	15	4	371	10 1		
13	240	8	-8 20	6	50	-11*-19	174	8	-3	-8	283	8	-2	5	89	14 -11		
14	21	49	9*	21	169	8	9 -18	76	17	20*	-7	257	7	4	6	87	13 -2	
15	187	8	10 22	46	49	40*-17	64	19	7*	-6	110	7	6	7	100	9 15		
16	165	7	-3 23	191	13	3 -16	133	8	6	-5	142	13	16	8	220	7 7		
17	123	9	10 H,K*	4,	5	-15 228	7	6	-4	338	9	11	9	58	33 13*			
18	83	12	-1 -23	101	12	1 -14	34	40	1*	-3	171	6	8	10	172	11 -14		
19	198	12	1 -22	44	46	20*-13	239	10	-6	-2	99	12	10	11	41	44 6*		
20	16	45	-28*-21	143	9	4 -12	218	7	-4	-1	266	8	3	12	103	11 -5		
21	85	13	6 -20	54	37	-5*-11	104	9	0	0	296	8	9	13	20	44 -13*		
22	49	59	-5*-19	0	44	-37*-10	188	7	12	1	64	13	13*	14	230	10 -3		
23	81	33	-6*-18	49	26	-22* -9	359	9	18	2	331	9	-1	15	36	45 19*		
			H,K*	4,	4	-17 293	8	11	-8	127	6	0	3	189	6	0	16 45 46 -10*	
-24	52	-11*-16	29	41	3*	-7 66	12	0	4	32	36	16*	17	53	27 18*			
-23	114	13	29 -15	200	7	-14 -6	261	8	7	5	139	6	11	18	150	9 15		
-22	42	45	31*-14	49	19	-14* -5	377	11	-4	6	319	9	4	19	51	43 22*		
-21	95	12	-11 -13	178	7	-1 -4	79	10	12	7	92	8	12	H,K*	4,	9		
-20	0	44	-4*-12	60	13	-8* -3	336	9	12	8	184	7	1	-19	9	49 -29*		
-19	258	8	7 -11	366	10	5 -2	214	6	9	9	253	8	-5	-18	122	10 10		

STRUCTURE FACTORS CONTINUED FOR UO₂(SO₄)₂(C₂H₅)₂O(C₂H₅)-(C₂H₅)₂NH₂⁺.

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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-17	31	49	26*	2	156	8	-14	-4	34	49	24*	17	81	17	-9*-22	41	47	-54*	
-16	96	16	14	3	108	10	18	-3	170	10	-13	19	108	14	0	-21	154	10	7
-15	55	28	6*	4	298	9	5	-2	45	46	-12*	21	97	18	-21*-20	48	64	-34*	
-14	21	8	3	5	40	50	-12*	-1	35	45	17*	23	59	45	23*-19	0	59	-46*	
-13	23	52	7*	6	68	29	7*	0	60	20	33*	H,K*	5,	1	-18	227	7	4	
-12	61	19	-4*	7	77	38	-6*	1	191	8	-2	-24	54	36	28*-17	171	7	4	
-11	76	16	9*	8	145	8	-8	2	80	18	35*-23	171	9	1	-16	84	11	-18	
-10	228	7	3	9	36	54	16*	3	68	19	-19*-22	47	38	-2*-15	232	7	-11		
-9	58	17	34*	10	119	9	11	4	53	57	-32*-21	0	45	-26*-14	239	9	6		
-8	234	9	28	11	105	11	7	5	114	11	-21	-28	88	13	-5	-13	29	50	-4*
-7	11	43	-5*	12	55	42	-8*	6	43	46	21*-19	230	8	10	-12	163	6	-7	
-6	18	47	-21*	13	0	46	-34*	7	155	11	3	-18	16	50	11*-11	304	8	-5	
-5	41	47	35*	14	156	12	8	8	38	47	-3*-17	214	8	7	-10	175	7	9	
-4	295	8	4	15	79	17	3*	9	21	54	-2*-16	117	8	3	-9	240	7	1	
-3	29	43	8*	16	82	39	11*	10	25	48	-3*-15	185	7	4	-8	357	10	-3	
-2	125	9	-15	H,K*	4,	11	11	130	11	6	-14	48	18	5*	-7	225	8	11	
-1	0	39	-13*-15	60	27	-19*	H,K*	4,	13	-13	375	10	-16	-6	71	11	-5		
1	287	10	-8	-14	121	14	21	-9	52	42	41*-12	132	8	-12	-5	350	10	2	
1	23	44	13*-13	101	13	42	-8	0	57	-1*-11	72	10	-9	-4	170	6	-19		
2	330	9	-3	-12	43	53	37*	-7	141	11	2	-10	110	8	4	-3	92	6	24
3	47	50	9*-11	141	9	6	-6	40	48	23*	-9	331	10	-1	-2	261	8	4	
4	25	40	6*-10	109	13	6	-5	104	12	-12	-8	121	6	1	-1	434	13	10	
5	75	12	-2	-9	44	46	22*	-4	0	53	-11*	-7	318	9	-1	0	44	16	1*
6	275	8	14	-8	140	8	2	-3	80	16	0*	-6	131	5	-6	1	336	10	13
7	32	41	-5*	-7	143	10	7	-2	43	52	9*	-5	195	6	-13	2	409	11	7
8	11	10	6	-6	25	50	12*	-1	150	13	-14	-4	158	5	4	3	225	6	-6
9	10	45	-3*	-5	98	29	-13*	0	54	28	25*	-3	546	15	-1	4	168	5	-6
10	15	8	6	-4	130	9	4	1	16	48	-10*	-2	95	11	3	5	317	8	-10
11	6	45	-2*	-3	80	14	3	2	61	23	36*	-1	322	18	18	6	253	7	12
12	198	8	-4	-2	71	14	23*	3	127	12	-17	9	225	6	-3	7	31	33	20*
13	52	58	6*	-1	184	8	-7	4	40	61	18*	1	433	12	6	8	311	8	-11
14	41	48	31*	6	151	8	1	5	122	14	8	2	58	9	-3	9	277	8	5
15	38	49	28*	1	40	43	1*	6	0	50	-6*	3	537	14	-13	10	39	34	-2*
16	175	10	7	2	171	8	-18	7	80	17	-5*	4	134	7	-9	11	184	9	10
17	44	48	7*	3	154	8	-4	8	22	57	10*	5	97	8	-13	12	265	8	3
18	79	18	-29*	4	68	16	47*	H,K*	5,	0	6	154	6	-9	13	111	8	10	
	H,K*	4,	10	5	87	18	-16*-23	55	75	1*	7	396	10	-7	14	42	27	-13*	
-17	54	30	6*	6	127	9	-7	-21	240	9	10	8	110	8	-1	15	210	7	-11
-16	99	20	-11*	7	72	16	-1*-19	110	13	-16	9	122	6	6	16	106	9	-8	
-15	38	47	-8*	8	75	15	29*-17	266	14	-12	10	176	6	8	17	92	11	-4	
-14	60	22	11*	9	134	10	-1	-15	362	10	-10	11	324	10	1	18	99	22	-2*
-13	119	10	9	10	84	31	-1*-13	103	9	14	12	51	23	45*	19	102	12	0	
-12	164	9	-15	11	32	47	18*-11	473	13	-22	13	293	10	-3	20	21	58	17*	
-11	11	47	3*	12	98	13	9	-9	179	6	5	14	117	20	12	21	98	16	-3
-10	165	11	5	13	105	13	1	-7	233	7	-11	15	44	45	42*	22	80	17	-1*
-9	92	12	-8	14	0	50	-22*	-5	394	12	-20	16	0	47	-35*	H,K*	5,	3	
-8	130	11	19	H,K*	4,	12	-3	48	15	-28*	17	164	10	-12	-24	78	34	22*	
-7	29	42	2*-13	107	13	7	-1	681	20	33	18	0	49	-26*-23	60	23	0*		
-6	201	8	-11	-12	89	16	14*	1	494	14	-7	19	126	11	20	-22	109	11	-18
-5	56	33	-9*-11	48	48	19*	3	220	7	9	20	0	53	-57*-21	0	46	-17*		
-4	38	41	27*-10	54	58	17*	5	569	15	-13	21	65	29	-10*-20	170	9	-4		
-3	97	13	-15	-9	140	10	-1	7	101	8	10	22	48	73	16*-19	95	11	-10	
-2	280	8	1	-8	69	18	33*	9	392	11	13	23	149	13	20	-18	40	49	3*
-1	60	26	22*	-7	33	56	-32*	11	232	8	-16	H,K*	5,	2	-17	52	57	10*	
0	206	8	-19	-6	79	15	14*	13	155	9	8	-24	88	15	-8	-16	283	8	-3
1	152	9	9	-5	119	11	-22	15	266	8	-9	-23	0	54	-24*-15	84	13	-21	

STRUCTURE FACTORS CONTINUED FOR
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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL
-14	192	6	11	-5	146	6	13	4	397	12	3	15	144	11	1
-13	207	7	-1	-4	469	14	9	5	64	13	6*	16	116	13	20
-12	252	8	1	-3	43	44	34*	6	264	8	-19	17	66	19	19*-10
-11	133	7	12	-2	364	10	12	7	121	7	8	18	155	9	-4
-10	356	12	3	-1	138	11	-3	8	157	6	13	19	71	23	-2*
-9	190	7	-13	0	140	5	8	9	44	48	-5*	20	0	49	-23*
-8	33	35	24*	1	49	18	15*	10	305	8	-16	H,K=	5,	7	-6
-7	195	6	-13	2	433	12	-3	11	34	51	1*-21	46	56	19*	-5
-6	445	13	-7	3	32	43	15*	12	88	14	-16	-20	86	23	5*
-5	137	5	-1	4	134	6	-17	13	55	17	14*-19	108	14	-3	-3
-4	223	6	2	5	36	30	26*	14	166	7	-4	-18	51	28	28*
-3	328	9	22	6	360	19	1	15	0	55	-30*-17	124	10	0	-1
-2	221	7	-11	7	57	13	7*	16	183	7	5	-16	97	14	-12
-1	46	12	5*	8	355	11	-13	17	41	52	-3*-15	68	29	4*	1
0	418	11	3	9	54	21	4*	18	70	29	11*-14	52	22	1*	2
1	196	6	3	10	36	39	23*	19	0	55	-13*-13	216	9	2	3
2	66	8	4	11	41	37	-1*	20	179	11	10	-12	134	8	-8
3	158	5	3	12	255	11	-17	21	51	63	33*-11	63	21	-21*	5
4	446	12	-1	13	28	41	-2*	H,K=	5,	6	-10	152	7	-11	6
5	66	9	4	14	134	8	2	-22	71	30	6*	-9	175	9	-11
6	317	9	-2	15	40	43	-7*-21	79	16	-8*	-8	83	16	7	8
7	184	6	6	16	132	11	-17	-20	89	14	5	-7	278	8	-10
8	161	7	4	17	26	44	-25*-19	58	31	-6*	-6	221	7	0	10
9	66	11	-2	18	264	8	5	-18	145	8	-8	-5	116	8	-3
10	333	9	-3	19	40	45	29*-17	83	17	24*	-4	147	6	16	12
11	47	23	-15*	20	53	26	30*-16	42	50	-6*	-3	337	9	-8	13
12	35	38	-5*	21	0	48	-26*-15	125	11	5	-2	124	7	5	14
13	150	12	-18	22	126	11	7	-14	189	7	5	-1	57	21	-22*
14	182	7	-22	H,K=	5,	5	-13	49	29	35*	0	173	7	-4	16
15	80	11	9	-23	15	49	-24*-12	176	11	0	1	257	7	9	17
16	124	12	1	-22	129	11	1	-11	159	9	-8	2	39	42	27*
17	72	14	-9*-21	64	26	33*	-10	128	8	-21	3	180	6	11	H,K=
18	93	11	9	-20	145	9	0	-9	183	7	1	4	203	8	-5
19	78	18	0	*-19	59	60	9*	-8	382	11	-8	5	120	7	-6
20	168	8	5	-18	0	50	-31*	-7	144	8	15	6	177	7	12
21	57	25	16*-17	32	45	-13*	-6	141	7	3	7	213	7	5	-15
22	86	24	16*-16	245	8	7	-5	284	8	-10	8	32	43	3*-14	55
	H,K=	5,	4	-15	40	52	-1*	-4	311	8	-14	9	84	10	-14
-23	6	49	-22*-14	147	10	-13	-3	29	37	4*	10	155	7	2	-12
-22	111	12	7	-13	54	18	-20*	-2	291	9	8	11	123	8	3
-21	11	46	5*-12	200	8	-6	-1	248	7	14	12	0	42	-44*-10	36
-20	99	11	4	-11	53	23	0*	0	66	12	-11*	13	164	8	-13
-19	0	44	-29*-10	403	11	-2	1	82	11	-10	14	102	11	1	-8
-18	238	8	1	-9	98	8	4	2	264	10	-12	15	25	44	3*
-17	52	27	27*	-8	5	47	-3*	3	144	6	-5	16	64	20	-19*
-16	51	20	6*	-7	112	7	1	4	59	13	19*	17	140	10	9
-15	42	51	30*	-6	517	16	-1	5	180	7	-5	18	55	61	34*
-14	244	7	7	-5	29	37	24*	6	215	7	-2	19	90	15	10
-13	43	23	37*	-4	299	9	-2	7	33	38	27*	H,K=	5,	8	-2
-12	285	9	11	-3	117	6	-4	8	257	8	-13	-19	61	48	-3*
-11	46	18	4*	-2	270	9	-11	9	127	11	-11	-18	73	19	17*
-10	212	6	12	-1	63	11	-12	10	45	22	31*-17	126	10	2	1
-9	71	22	3*	0	333	10	2	11	67	18	-14*-16	0	53	-12*	2
-8	549	16	1	1	85	7	16	12	172	8	-13	-15	183	11	-6
-7	96	7	9	2	77	14	2*	13	74	14	17*-14	39	45	-28*	4
-6	132	6	-6	3	108	7	9	14	103	10	2	-13	15	43	2*
												5	0	41	-25*

STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂O(C₂H₅)₂NH₂⁺.

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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL					
6	59	17	19*	-3	132	9	-10	-12	0	52	-24*	15	125	16	10	-20	0	56	-18*	
7	199	8	*	-2	86	16	-14*	-10	359	11	-7	16	0	50	-2*	-19	153	11	-4	
8	12	45	-11*	-1	70	32	13*	-8	55	18	-9*	17	0	53	-59*	-18	146	10	13	
9	89	11	5	0	160	8	-7	-6	358	11	-3	18	198	10	21	-17	78	18	23*	
10	6	54	-17*	1	108	15	10	-4	417	13	-5	19	58	35	29*	-16	51	34	9*	
11	136	9	4	2	53	25	20*	-2	68	12	-12	20	95	18	12*	-15	246	8	-6	
12	41	45	25*	3	143	8	-6	0	440	12	8	21	64	73	7*	-14	70	53	-32*	
13	171	9	-3	4	115	10	-9	2	141	7	0	H,K=	6,	2	-13	157	8	15		
14	50	32	40*	5	0	46	-7*	4	208	7	16	-23	80	24	-8*	-12	50	65	-35*	
15	0	48	-2*	6	71	17	-12*	6	355	11	-12	-22	84	25	38*	-11	265	11	-4	
16	35	49	23*	7	119	18	-2	8	135	9	10	-21	81	41	4*	-10	59	42	41*	
		H,K=	5,	10	8	34	56	-20*	10	282	8	6	-20	187	10	4	-9	360	15	-4
-16	57	64	14*	9	0	58	-43*	12	233	8	-1	-19	66	35	1*	-8	171	7	12	
-15	131	28	-7*	10	109	12	2	14	97	14	-14	-18	53	38	1*	-7	47	58	8*	
-14	0	50	-51*	11	95	14	6	16	271	9	8	-17	182	9	-3	-6	206	9	1	
-13	84	24	47*	12	47	58	38*	18	52	53	-3*	-16	177	9	-5	-5	349	12	6	
-12	85	29	-13*	H,K=	5,	12	20	149	12	6	-15	76	17	10*	-4	0	41	-23*		
-11	173	9	3	-11	61	26	4*	H,K=	6,	1	-14	181	12	-3	-3	125	8	0		
-10	4	52	-4*-10	30	50	-18*-23	66	68	57*	-13	271	12	7	-2	195	7	7			
-9	61	28	-21*	-9	14	49	3*-22	164	11	9	-12	21	46	-48*	-1	261	9	14		
-8	88	12	-11	-8	131	16	-9	-21	53	66	9*-11	228	11	6	0	108	9	-4		
-7	116	14	12	-7	55	28	1*-20	55	36	53*-10	270	10	5	1	341	12	-17			
-6	48	26	18*	-6	42	47	3*-19	57	34	-20*	-9	160	8	-10	2	161	10	6		
-5	151	8	1	-5	72	20	6*-18	239	9	-3	-8	123	8	-3	3	66	30	2*		
-4	74	15	-22*	-4	126	11	-2	-17	0	49	-17*	-7	286	11	6	4	107	9	-1	
-3	50	38	27*	-3	45	53	42*-16	215	12	-6	-6	253	11	-5	5	266	8	9		
-2	103	10	-7	-2	134	10	1	-15	130	10	1	-5	37	40	14*	6	166	9	20	
-1	218	7	-1	-1	54	55	-18*-14	145	9	5	-4	386	16	-1	7	218	8	-2		
.	16	44	-32*	0	0	54	-25*-13	77	16	-31*	-3	273	9	4	8	224	8	13		
1	158	9	-18	1	77	16	22*-12	314	13	-9	-2	70	12	26	9	117	10	1		
2	118	9	-11	2	155	11	-1	-11	45	48	-21*	-1	168	7	14	10	0	45	-35*	
3	99	25	-6*	3	0	47	-7*-10	0	43	-13*	0	276	12	-18	11	274	9	-2		
4	38	43	11*	4	79	24	6*-9	102	10	3	1	90	16	6	12	22	55	-28*		
5	181	8	-19	5	50	35	3*-8	374	13	-6	2	208	7	-9	13	0	49	-58*		
6	49	28	-3*	6	114	11	-4	-7	127	8	8	3	225	8	-2	14	131	14	16	
7	0	56	-27*	7	24	48	20*	-6	293	9	-4	4	237	7	-6	15	186	9	13	
8	71	16	21*	8	136	10	4	-5	98	10	-19	5	149	7	9	16	0	52	-34*	
9	156	12	-2	9	32	57	-32*	-4	195	10	14	6	279	8	-7	17	144	25	8	
10	61	20	44*	H,K=	5,	13	-3	43	23	19*	7	86	11	-6	18	65	28	0*		
11	125	13	8	-6	147	10	8	-2	473	17	-13	8	49	23	29*	19	73	24	23*	
12	83	20	10*	-5	0	50	-17*	-1	179	7	-4	9	205	9	-23	20	35	57	-17*	
13	56	56	5*	-4	84	17	-8*	0	142	7	11	10	190	8	-8	21	136	13	22	
14	32	49	3*	-3	40	49	28*	1	191	8	-24	11	14	45	8*	H,K=	6,	4		
15	134	10	15	-2	76	25	7*	2	305	8	-20	12	181	14	0	-22	43	56	9*	
	H,K=	5,	11	-1	32	52	24*	3	0	39	-33*	13	208	8	9	-21	101	22	-16*	
-14	67	35	-15*	0	99	14	-31	4	288	8	-13	14	20	48	-2*	-20	81	20	40*	
-13	110	15	4	1	31	48	18*	5	35	39	-8*	15	43	50	-28*	-19	81	20	-11*	
-12	69	23	3*	2	50	36	33*	6	88	18	-6*	16	167	9	22	-18	74	20	66*	
-11	15	47	8*	3	49	49	44*	7	174	9	10	17	132	11	20	-17	197	9	-9	
-10	125	11	0	4	120	19	0	8	316	9	-15	18	0	54	-53*	-16	73	19	32*	
-9	112	11	5	H,K=	6,	0	9	38	55	24*	19	105	17	-6	-15	82	23	50*		
-8	31	46	25*-22	91	18	20*	10	197	12	4	20	59	47	-36*	-14	0	48	-8*		
-7	86	13	-5	-20	207	10	-10	11	98	12	-8	21	0	60	-1*	-13	274	9	-6	
-6	130	9	2	-18	136	14	8	12	141	20	-3	H,K=	6,	3	-12	46	47	13*		
-5	3	46	-38*-16	236	9	-8	13	0	47	-8*	-22	80	23	6*	-11	259	9	7		
-4	76	16	3*-14	352	10	4	14	225	11	4	-21	124	32	13*	-10	43	45	27*		

STRUCTURE FACTORS CONTINUED FOR $UO_2(SO_4(C_2H_5)_2)_2(O(C_2H_5))-(C_2H_5)_2NH_2^+$.

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STRUCTURE FACTORS CONTINUED FOR
UO₂(SO₄(C₂H₅)₂)₂(O(C₂H₅))₂NH₂⁺.

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L	F	O	B	S	G	D	E	L	F	O	B	S	G	D	E	L	F	O	S	G	D	E
2	72	26	41*	7	0	52	-30*-21	84	23	-4*	-6	286	9	-3	18	161	19	6				
3	98	19	-8*	8	110	16	30	-20	120	15	0	-5	56	23	46*	11	0	51	-7*			
4	0	58	-17*	9	227	8	-3	-19	71	24	68*	-4	43	44	29*	12	258	9	15			
5	88	21	37*	10	0	48	-32*-18	141	11	10	-3	0	45	-13*	13	47	69	24*				
	H,K=	7,		11	156	14	13	-17	138	13	19	-2	287	9	1	14	0	54	-38*			
-21	117	16	18	12	86	15	-6	-16	51	61	-8*	-1	0	54	-21*	15	0	56	-50*			
-19	199	9	-1	13	140	10	17	-15	69	21	25*	0	304	9	11	16	156	18	31			
-17	113	42	28*	14	9	50	-25*-14	208	9	-9	1	26	45	2*	17	47	62	37*				
-15	143	10	-20	15	193	9	20	-13	109	12	-3	2	0	45	-23*	H,K=	7,	6				
-13	209	8	-14	16	90	17	37*-12	137	10	0	3	0	45	-19*	-19	86	22	-2*				
-11	98	16	16	17	34	54	19*-11	82	15	-19*	4	255	8	-13	-18	106	16	2				
-9	357	14	-7	18	0	71	-38*-10	159	9	-10	5	55	23	16*	-17	74	75	34*				
-7	232	8	-8	19	152	13	-2	-9	45	46	19*	6	125	23	10	-16	161	13	6			
-5	242	8	-18	H,K=	7,	2	-8	251	8	-2	7	105	11	16	-15	79	23	-16*				
-3	401	14	-15	-21	73	25	22*	-7	198	8	-10	8	242	8	-8	-14	25	53	19*			
-1	35	42	16*	-20	0	58	-42*	-6	81	13	26	9	0	68	-38*	-13	118	12	18			
1	427	11	9	-19	183	10	11	-5	192	11	-7	10	230	9	-9	-12	227	15	6			
3	134	8	-29	-18	69	32	-5*	-4	353	14	-4	11	65	22	33*	-11	0	52	-26*			
5	187	8	7	-17	36	52	-20*	-3	46	32	24*	12	54	24	16*	-10	148	16	1			
7	286	9	-21	-16	125	11	-1	-2	134	9	-14	13	46	51	41*	-9	76	20	-41*			
9	146	9	14	-15	141	17	16	-1	91	11	-2	14	230	9	25	-8	84	25	-4*			
11	156	9	-7	-14	0	54	-32*	0	198	8	2	15	60	30	49*	-7	28	49	-33*			
13	154	24	1	-13	87	15	-22	1	83	13	-10	16	126	19	23	-6	129	27	-31*			
15	111	14	24	-12	190	15	-2	2	302	9	-4	17	0	75	-10*	-5	77	18	0*			
17	196	10	5	-11	98	17	12	3	118	9	3	18	97	18	12*	-4	64	75	41*			
19	13	57	-28*	-10	182	9	-10	4	91	12	13	H,K=	7,	5	-3	147	9	13				
	H,K=	7,	1	-9	249	10	7	5	167	12	-4	-20	140	13	27	-2	225	8	0			
-22	4	73	-6*	-8	70	20	-4*	6	209	8	-1	-19	0	56	-13*	-1	0	48	-27*			
-21	165	12	9	-7	122	10	-7	7	0	46	-17*	-18	127	24	3*	0	205	8	-8			
-2	65	28	16*	-6	188	8	0	8	125	10	6	-17	22	54	-14*	1	109	11	9			
-19	52	-12*	-5	158	12	-21	9	163	10	2	-16	101	16	2	2	0	47	-32*				
-18	62	56	22*	-4	0	46	-26*	10	115	11	-9	-15	0	72	-38*	3	92	14	-11			
-17	179	10	-2	-3	259	10	-9	11	0	80	-35*	-14	273	9	16	4	210	9	-14			
-16	63	23	58*	-2	323	13	18	12	248	9	8	-13	0	59	-24*	5	122	10	17			
-15	115	12	-18	-1	0	43	-17*	13	100	27	29*	-12	74	38	-9*	6	85	16	-20*			
-14	1	1	20	-6*	0	205	11	-4	14	63	27	-4*	-11	51	36	-8*	7	161	9	-1		
-13	121	10	7	1	172	8	-11	15	98	16	19	-10	195	8	3	8	141	11	-15			
-12	95	40	5*	2	46	31	2*	16	142	12	11	-9	42	57	-5*	9	28	49	25*			
-11	268	8	8	3	127	9	-12	17	64	34	54*	-8	193	9	-13	10	184	9	2			
-1	82	15	35	4	162	8	-6	18	122	15	20	-7	82	19	2*	11	123	20	12			
-9	59	20	3*	5	194	9	-10	19	74	28	16*	-6	71	18	-7*	12	0	53	-29*			
-8	125	9	3	6	40	46	-28*	H,K=	7,	4	-5	101	12	10	13	82	21	12*				
-7	297	14	-6	7	278	9	0	-20	98	40	13*	-4	278	9	4	14	152	14	4			
-6	36	43	29*	8	93	17	-9	-19	55	47	14*	-3	0	55	-8*	15	0	59	-40*			
-5	327	10	5	9	38	46	4*	-18	122	14	1	-2	178	8	11	16	29	57	-26*			
-4	135	8	13	10	168	8	-2	-17	56	70	54*	-1	42	47	-21*	H,K=	7,	7				
-3	76	15	-13*	11	156	9	0	-16	215	11	4	0	111	19	-14	-17	134	14	11			
-2	38	43	6*	12	52	59	34*	-15	6	53	-49*	1	66	19	12*	-16	0	74	-56*			
-1	325	9	-5	13	140	10	9	-14	0	50	-4*	2	284	9	-1	-15	86	21	-6*			
-1	179	7	11	14	159	13	21	-13	0	69	-4*	3	0	54	-32*	-14	128	14	-14			
1	0	42	-34*	15	93	16	20	-12	240	8	-7	4	82	15	-19*	-13	109	15	13			
2	152	8	-1	16	44	54	-19*	-11	69	20	11*	5	43	61	-12*	-12	71	74	4*			
3	334	9	-11	17	168	12	21	-10	203	19	-3	6	218	8	-11	-11	160	12	-8			
4	45	34	2*	18	55	57	-20*	-9	60	22	5*	7	75	16	67*	-10	95	16	14			
5	286	11	-11	19	0	58	-45*	-8	103	12	-7	8	151	10	-9	-9	22	54	2*			
6	69	24	9*	H,K=	7,	3	-7	0	46	-15*	9	53	32	18*	-8	90	26	5*				

STRUCTURE FACTORS CONTINUED FOR
 $\text{UO}_2(\text{SOCl}(\text{C}_2\text{H}_5)_2)_2(\text{O}(\text{C}_2\text{H}_5)) - (\text{C}_2\text{H}_5)_2\text{NH}_2^+$.

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L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	L	FOB	SG	DEL	
-7	145	10	2	-14	0	58	-14*	-2	0	62	-60*	7	66	20	-15*-13	
-6	90	14	35	-13	105	17	25	-1	119	14	22	8	47	48	12*-12	
-5	156	14	-1	-12	36	56	28*	0	25	65	-36*	9	8	50	-38*-11	
-4	137	14	-3	-11	136	14	-16	1	46	55	37*	10	165	10	-2*-10	
-3	49	-18*	-10	30	55	11*	2	92	21	-14*	11	70	22	17*	-9	
-2	52	35	-9*	-9	18	54	5*	3	84	27	-6*	12	41	51	5*-8	
-1	172	9	2	-8	0	55	-8*	4	0	58	-14*	13	74	22	12*-7	
0	112	12	-7	-7	192	18	20	5	93	50	19*	14	147	13	10	
1	45	71	-13*	-6	57	49	36*	H,K=	8,	0	15	63	30	59*	-5	
2	167	9	2	-5	138	12	-12	-20	84	23	16*	16	152	11	17	
3	175	9	-8	-4	23	53	-3*-18	159	12	-2	17	0	57	-29*	-3	
4	45	48	26*	-3	58	49	0*-16	E	86	-43*	H,K=	8,	2	-2	119	
5	199	20	-9	-2	0	59	-23*-14	154	14	-8	-19	76	29	30*	-1	
6	73	37	-22*	-1	186	11	-10	-12	145	11	-18	-18	136	13	9	
7	71	20	33*	0	0	53	-22*-10	87	17	-14*	-17	69	27	-8*	1	
8	85	18	E*	1	65	26	12*	-8	257	8	-11	-16	28	53	-8*	2
9	182	10	3	2	0	57	-17*	-6	191	8	8	-15	124	12	-4	
10	66	58	3*	3	155	11	-18	-4	141	9	-26	-14	124	12	-16	
11	65	27	12*	4	0	54	-2*	-2	299	9	4	-13	0	50	-22*	5
12	118	13	-4	5	150	12	-17	0	78	44	44*	-12	151	10	2	
13	96	25	-18*	6	77	21	42*	2	448	12	12	-11	103	13	-4	
14	31	56	E*	7	43	54	16*	4	209	8	4	-10	42	47	2*	8
15	99	19	-1*	8	0	72	-29*	6	171	9	-8	-9	98	13	-5	
	H,K=	7,	8	9	147	18	2	8	247	9	11	-8	228	8	-8	10
-16	17	67	-11*	10	0	55	-14*	10	0	50	-16*	-7	80	15	4*	11
-15	114	35	-9*	11	98	19	19*	12	261	9	22	-6	129	16	-14	12
-14	0	61	-13*	12	0	57	-10*	14	72	25	-28*	-5	169	9	-5	13
-13	126	14	-17	H,K=	7,	10	16	92	19	29*	-4	109	11	-1	14	
-12	0	55	-40*-11	18	74	-26*	H,K=	8,	1	-3	85	21	5*	15	0	
-11	81	28	18*-10	79	23	32*-20	125	15	-9	-2	156	9	-20	16	79	
-10	46	71	3*	-9	156	12	3	-19	83	21	27*	-1	216	9	1	
-9	243	10	11	-8	57	55	31*-18	0	55	-12*	0	67	18	26*-18	32	
-8	0	52	-32*	-7	62	36	-18*-17	0	55	-48*	1	238	8	1	-17	
-7	75	22	-20*	-6	65	74	3*-16	160	11	-7	2	204	9	-11	-16	
-6	69	23	9*	-5	91	20	-22*-15	49	52	44*	3	67	21	10*-15	199	
-5	121	14	6	-4	68	37	38*-14	91	25	-12*	4	170	9	6	-14	
-4	0	52	-41*	-3	154	11	2	-13	45	51	-29*	5	182	9	-13	
-3	198	12	-7	-2	73	23	24*-12	161	14	-26	6	98	12	-4	-12	
-2	111	13	6	-1	80	20	57*-11	38	48	10*	7	28	47	-15*-11	211	
-1	0	70	-32*	0	71	25	-2*-10	229	9	-15	8	175	9	-2	-16	
	81	18	7*	1	156	12	-3	-9	40	51	-15*	9	132	11	-2	
1	217	9	4	2	92	16	83	-8	58	29	-14*	10	0	68	-6*	
2	0	50	-8*	3	23	56	-55*	-7	82	14	5	11	147	10	24	
3	145	11	-2	4	106	16	30	-6	199	8	-19	12	107	18	-15	
4	0	52	-28*	5	77	78	-17*	-5	0	47	-13*	13	62	37	37*	
5	117	13	5	6	49	71	18*	-4	228	8	-10	14	73	24	-10*	
6	49	51	40*	7	136	13	9	-3	125	10	5	15	25	56	-62*	
7	208	9	6	8	14	59	-38*	-2	77	39	14*	16	71	27	11*	
8	34	52	23*	9	0	58	-17*	-1	110	15	3	17	0	57	-27*	
9	0	54	-44*	H,K=	7,	11	0	310	9	0	H,K=	8,	3	0	53	
10	54	44	27*	-8	92	21	0*	1	74	17	6*-19	135	13	16	1	
11	117	15	-9	-7	119	15	10	2	59	31	5*-18	0	55	-7*	2	
12	71	25	66*	-6	0	58	-9*	3	132	9	28	-17	132	13	4	
13	89	21	4*	-5	102	18	5	4	298	9	-7	-16	109	19	34	
14	36	57	-11*	-4	106	42	-4*	5	80	16	26*-15	64	27	12*	5	
	H,K=	7,	9	-3	46	56	8*	6	256	8	5	-14	64	25	27*	6

STRUCTURE FACTORS CONTINUED FOR
 $\text{UO}_2(\text{SO}(\text{C}_2\text{H}_5)_2)_2(\text{O}(\text{C}_2\text{H}_5))_2(\text{C}_2\text{H}_5)_2\text{NH}_2^+$.

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L	F	O	B	S	G	D	E	L	F	O	B	S	G	D	E	L	F	O	B	S	G	D	E
7	55	36	0*	-5	206	9	6	-7	0	55	-41*	-13	188	11	17	-9	0	65	-35*				
8	48	50	9*	-4	69	23	-6*	-6	118	13	27	-11	178	12	-4	-8	59	29	-15*				
9	220	9	13	-3	68	22	39*	-5	81	21	27*	-9	66	23	6*	-7	182	14	-7				
10	53	57	36*	-2	123	11	5	-4	95	18	-23*	-7	160	9	-14	-6	57	31	-24*				
11	203	9	-1	-1	174	9	1	-3	0	53	-5*	-5	47	49	-27*	-5	103	13	8				
12	35	53	1*	0	58	27	50*	-2	172	11	5	-3	167	9	10	-4	144	10	20				
13	6	68	-23*	1	151	10	0	-1	19	80	-36*	-1	248	11	1	-3	153	9	18				
14	28	55	6*	2	88	17	-4*	0	36	74	11*	1	13	50	-4*	-2	81	16	50*				
15	130	32	-5*	3	0	51	-31*	1	0	54	-51*	3	279	9	-1	-1	179	10	2				
16	55	55	45*	4	56	31	-6*	2	195	10	3	5	137	11	-12	0	146	10	-2				
	H,K=	8,	5	5	129	11	-7	3	0	54	-19*	7	129	11	15	1	0	50	-46*				
-17	141	12	17	6	82	18	16*	4	107	15	2	9	158	11	-5	2	146	20	0				
-16	59	40	19*	7	70	22	20*	5	0	55	-58*	11	21	54	6*	3	186	9	1				
-15	58	50	17*	8	115	13	7	6	85	29	-1*	13	155	13	-1	4	54	35	2*				
-14	77	21	48*	9	145	20	5	7	0	59	-15*	H,K=	9,	1	5	94	15	4					
-13	199	11	-7	10	49	54	48*	8	157	13	10	-17	62	35	42*	6	174	10	8				
-12	43	60	40*	11	166	24	4	9	82	30	53*	-16	54	56	-4*	7	102	14	11				
-11	87	21	-3*	12	62	39	-34*	10	65	31	37*	-15	193	10	11	8	65	26	13*				
-10	58	62	37*	13	42	56	38*	11	48	57	23*	-14	0	55	-14*	9	143	11	22				
-9	180	15	3	14	76	55	12*	H,K=	8,	9	-13	118	14	4	10	122	13	15					
-8	47	81	28*	H,K=	8,	7	-11	0	58	-21*	-12	70	24	-14*	11	0	55	-12*					
-7	198	9	-4	-15	12	56	-18*	-10	143	13	7	-11	124	12	9	12	105	16	21				
-6	6	57	-65*	-14	101	18	11	-9	0	59	-14*	-10	0	63	-21*	13	85	23	-14*				
-5	119	22	20	-13	107	16	1	-8	45	56	12*	-9	187	20	-1	14	79	24	42*				
-4	56	31	-8*	-12	102	16	33	-7	0	57	-25*	-8	0	51	-62*	H,K=	9,	3					
-3	269	11	-4	-11	21	58	-18*	-6	146	12	14	-7	21	49	14*	-16	116	16	6				
-2	55	30	22*	-10	177	13	11	-5	26	55	13*	-6	0	49	-34*	-15	36	58	-39*				
-1	147	10	-3	-9	55	55	-33*	-4	127	14	5	-5	173	11	-23	-14	32	55	-22*				
1	81	19	15*	-8	6	69	-16*	-3	0	56	-3*	-4	0	49	-20*	-13	44	55	3*				
1	89	15	-4	-7	94	16	23	-2	73	26	8*	-3	134	11	-33	-12	175	10	2				
2	62	22	36*	-6	147	11	-6	-1	0	56	-4*	-2	77	24	-6*	-11	46	55	-1*				
3	166	9	-18	-5	90	17	39*	0	169	11	-10	-1	116	12	1	-10	23	53	-39*				
4	109	12	36	-4	124	13	-10	1	74	24	69*	0	99	16	21	-9	109	14	2				
5	0	53	-14*	-3	137	12	-6	2	46	69	10*	1	278	9	-1	-8	163	10	-1				
6	41	58	-12*	-2	62	27	14*	3	0	56	-11*	2	0	54	-39*	-7	66	24	24*				
7	211	9	-2	-1	97	22	16*	4	165	14	11	3	87	16	10	-6	183	9	4				
8	57	31	42*	0	167	12	13	5	23	56	15*	4	80	24	-3*	-5	126	11	24				
9	150	11	-8	1	100	19	40*	6	160	12	21	5	150	11	-24	-4	32	53	-1*				
10	77	21	31*	2	0	51	-36*	7	20	56	17*	6	51	45	51*	-3	46	52	-32*				
11	103	24	3*	3	69	25	-31*	8	39	57	22*	7	154	10	11	-2	195	9	-9				
12	52	61	46*	4	133	11	10	H,K=	8,	10	8	57	32	-8*	-1	90	16	11					
13	194	10	13	5	0	61	-7*	-7	0	66	-11*	9	28	54	-38*	0	101	16	-5				
14	0	57	-23*	6	121	17	-4	-6	0	60	-75*	10	56	41	12*	1	116	11	14				
15	73	38	43*	7	78	25	-19*	-5	63	35	11*	11	163	11	16	2	133	14	14				
	H,K=	8,	6	8	64	28	46*	-4	47	58	-28*	12	57	42	19*	3	36	49	30*				
-16	24	57	-15*	9	67	29	-4*	-3	12	57	7*	13	0	59	-39*	4	164	10	1				
-15	126	20	-16	10	132	13	6	-2	139	31	20*	14	80	23	40*	5	96	15	12				
-14	84	45	19*	11	47	56	0*	-1	0	58	-62*	H,K=	9,	2	6	50	66	35*					
-13	46	54	22*	12	53	57	3*	0	68	38	43*	-17	105	24	-5*	7	0	54	-54*				
-12	114	14	26	H,K=	8,	8	1	71	30	10*	-16	115	29	52*	8	208	14	11					
-11	175	12	4	-13	0	58	-5*	2	155	13	6	-15	0	55	-13*	9	41	54	10*				
-10	50	52	43*	-12	134	14	9	3	62	37	43*	-14	142	12	13	10	116	15	10				
-9	82	28	-21*	-11	0	56	-13*	4	103	20	18*	-13	148	23	15	11	102	16	38				
-8	134	12	-4	-10	45	55	-4*	H,K=	9,	0	-12	0	53	-2*	12	33	57	-34*					
-7	141	11	-5	-9	0	56	-9*	-17	176	11	1	-11	111	15	-19	13	38	57	-3*				
-6	48	69	-43*	-8	192	10	12	-15	0	55	-51*	-10	152	10	18	H,K=	9,	4					

STRUCTURE FACTORS CONTINUED FOR
 $\text{UO}_2(\text{SO}_4\text{C}_2\text{H}_5)_2(\text{O}(\text{C}_2\text{H}_5))-(\text{C}_2\text{H}_5)_2\text{NH}_2^+$.

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L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL	L	F08	SG	DEL
-15	48	56	43*	12	0	58	-56*	0	0	56	-18*	-9	145	12	9
-14	155	12	11	H,K*	9,	6		1	0	57	-36*	-8	69	26	22*
-13	0	67	-20*-13	28	57	-21*	2	0	56	-21*	-7	10	65	-63*	3
-12	56	71	53*-12	0	57	-9*	3	171	13	23	-6	161	11	9	4
-11	0	54	-23*-11	51	70	-28*	4	65	33	41*	-5	0	55	-75*	5
-10	208	9	11	-10	119	15	-18	5	66	74	0*	-4	77	23	14*
-9	33	53	30*	-9	21	55	3*	6	0	59	-55*	-3	79	23	-18*
-8	163	15	2	-8	82	22	-10*	H,K*	9,	9	-2	109	15	-6	8
-7	44	52	5*	-7	123	18	-18	-2	63	38	32*	-1	0	60	-17*
-6	104	15	-9	-6	95	18	-15*	-1	86	22	18*	0	131	12	2
-5	67	24	55*	-5	126	12	44	0	0	58	-11*	1	103	15	-1
-4	259	16	4	-4	192	10	15	H,K*	10,	0	2	32	52	19*	-8
-3	97	14	41	-3	67	28	-6*-14	0	59	-60*	3	77	21	1*	-7
-2	38	51	-2*	-2	51	53	26*-12	144	12	11	4	27	70	-78*	-6
-1	39	51	-2*	-1	87	20	-5*-10	147	12	7	5	58	34	26*	-5
0	166	9	-4	0	163	10	12	-8	66	71	-12*	6	30	69	-11*
1	0	51	-17*	1	70	23	43*	-6	186	10	-19	7	94	19	-2*
2	123	14	-5	2	117	18	15	-4	32	53	-28*	8	96	19	14*
3	38	53	10*	3	94	18	-7*	-2	163	10	8	9	0	58	-43*
4	49	53	-28*	4	90	18	18*	0	140	13	-16	10	127	16	31
5	49	51	39*	5	46	67	3*	2	0	71	-37*	H,K*	10,	3	1
6	264	9	11	6	126	13	-1	4	173	11	-2	-12	0	59	-20*
7	9	53	5*	7	51	55	-3*	6	59	39	-29*	-11	169	11	8
8	0	65	-42*	8	87	35	43*	8	83	21	1*-10	0	57	-40*	4
9	61	47	50*	9	63	35	-3*	10	143	22	3	-9	80	26	25*
10	128	14	-4	10	71	24	-5*	H,K*	10,	1	-8	33	56	-32*	6
11	67	28	62*	H,K*	9,	7	-14	141	13	-1	-7	135	13	7	7
12	113	44	-4*-11	43	57	2*-13	48	56	33*	-6	58	37	50*	H,K*	10,
13	0	59	-16*-10	0	57	-13*-12	89	21	-7*	-5	136	12	10	-8	13
	H,K*	9,	5	-9	139	13	3	-11	108	15	24	-4	121	13	13
-14	37	56	4*	-8	78	25	-14*-10	106	15	11	-3	43	54	-17*	-6
-13	36	73	6*	-7	0	57	-20*	-9	0	55	-29*	-2	119	14	22
-12	150	12	-10	-6	66	32	-15*	-8	149	11	-2	-1	136	12	-17
-11	0	66	-12*	-5	142	13	-1	-7	75	22	17*	0	0	53	-25*
-10	52	54	-20*	-4	43	56	23*	-6	0	54	-24*	1	46	54	-10*
-9	41	55	-5*	-3	169	16	-7	-5	26	53	-14*	2	71	43	-6*
-8	181	10	14	-2	112	14	11	-4	199	10	9	3	130	12	34
-7	0	54	-22*	-1	93	23	18*	-3	0	53	-38*	4	0	89	-3*
-6	235	9	24	0	47	55	1*	-2	107	15	-13	5	99	18	-28*
-5	58	33	13*	1	171	10	20	-1	50	52	-8*	6	80	23	3*
-4	0	65	-40*	2	99	16	29	0	90	17	0*	7	46	55	39*
-3	53	46	8*	3	31	55	16*	1	54	38	33*	8	28	62	-18*
-2	210	9	-2	4	86	22	0*	2	154	11	-1	9	80	70	-31*
-1	0	53	-7*	5	136	12	31	3	2	56	-44*	H,K*	10,	4	H,K*
0	105	13	27	6	39	57	36*	4	0	67	-28*-11	35	67	17*	-7
1	55	33	40*	7	85	59	3*	5	79	21	16*-10	33	56	28*	-5
2	151	13	9	8	79	80	4*	6	101	25	-15*	-9	183	10	22
3	0	52	-4*	H,K*	9,	8	7	40	55	18*	-8	0	57	-4*	-1
4	158	10	6	-8	0	72	-4*	8	100	18	-2	-7	104	17	-10
5	58	34	11*	-7	135	15	-14	9	71	84	39*	-6	0	60	-16*
6	0	54	-32*	-6	0	62	-28*	10	6	57	-29*	-5	99	17	10
7	80	28	38*	-5	83	23	15*	H,K*	10,	2	-4	0	55	-10*	-7
8	160	19	1	-4	0	63	-34*-13	114	18	4	-3	192	16	17	-6
9	0	55	-24*	-3	122	15	8	-12	41	58	-45*	-2	0	64	-31*
10	144	17	5	-2	0	66	-7*-11	26	65	24*	-1	0	55	-14*	-4
11	0	86	-36*	-1	143	14	-3	-10	88	20	9*	0	44	62	4*
												H,K*	11,	0	6

**STRUCTURE FACTORS CONTINUED FOR
 $\text{UO}_2(\text{SO}_4\text{C}_2\text{H}_5)_2\text{O}(\text{C}_2\text{H}_5)_2-(\text{C}_2\text{H}_5)_2\text{NH}_2^+$.**

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This report was done with support from the Department of Energy.
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