

COVALENCY IN AMERICIUM(III) HEXACHLORIDE

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Supporting Information

Table S1. Crystallographic information for (PPh₄)₃AmCl₆.

Compound	(PPh ₄) ₃ AmCl ₆
Color and habit	Pink plate
Space group	<i>P</i> 2 ₁
<i>a</i> (Å)	15.6209(9)
<i>c</i> (Å)	16.1527(9)
<i>V</i> (Å ³)	3883.8(4)
<i>Z</i>	2
<i>T</i> (K)	298
<i>λ</i> (Å)	0.71073

Maximum $2\theta(\text{deg.})$	27.485
$\rho B_{\text{calcdB}} (\text{g cm}^{-3})$	1.26
$\mu(\text{Mo } K\alpha) (\text{mm}^{-1})$	1.291
$R(F)$ for $F_o^2 > 2s(F_o^2)^a$	0.0473
$R_w(F_o^2)^b$	0.1193

$$^a R(F) = \sum \|F_o\| - \|F_c\| / \sum \|F_o\| \cdot ^b R_w(F_o^2) = \left[\sum \left[w(F_o^2 - F_c^2)^2 \right] / \sum wF_o^4 \right]^{1/2}.$$

Table S2. Selected bond lengths for (NBu₄)M[S₂P(^tBu₂C₁₂H₆)]₄ (M = Nd, Eu, Am).

Bond	Distance
Am1-Cl4	2.713(3)
Am1-Cl6	2.714(3)
Am1-Cl5	2.714(3)
Am1-Cl3	2.725(3)
Am1-Cl2	2.727(3)
Am1-Cl1	2.752(3)