

**SINTESIS DAN STRUKTUR KRISTAL “ADDUK” ASETONITRIL
SENYAWA TETRA PHENYL PHOSPONIUM TETRA KLORIDA
DYSPROSAT(III), $(\text{Ph}_4\text{P})\text{DyCl}_4(\text{CH}_3\text{CN})$**

Asrial

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ABSTRACT: Single crystals of $(\text{Ph}_4\text{P})\text{DyCl}_4(\text{CH}_3\text{CN})$ is obtained from the reaction of dysprosium trichloride, DyCl_3 with tetra phenyl phosphonium chloride, Ph_4PCl in acetonitrile. The crystal structures monoclinic, $P2_1/n$ $Z = 4$, $a = 997.3(5)$; $b = 1835.8(7)$; $c = 1626.7(5)$ pm, $\beta = 104.67(4)^0$; $R_1 = 0.0469$, $wR_2 = 0.0971$ for $I > 2\sigma(I)$ contain the dimeric anions $[\text{Dy}_2(\mu_2\text{-Cl})_2(\mu_1\text{-Cl})_6(\text{CH}_3\text{CN})_2]^{2-}$ and $(\text{Ph}_4\text{P})^+$ cation in slightly different packing modes.

Keywords: Synthesis; Crystal Structure; Dysprosium;