Colorless needles of the arsenite bromide La₃OBr[AsO₃]₂ were synthesized from ammonium dihydrogen arsenate, ammonium bromide and lanthanum oxide in an NaBr/KBr flux at 900 °C. La₃OBr[AsO₃]₂ crystallizes with the centrosymmetric tetragonal La₃OCl[AsO₃]₂ type, space group P4₂/mnm. The structure was refined from single-crystal diffractometer data: $a = 13.0431(15)$ Å, $c = 5.6127(7)$ Å, $wR² = 0.0454$, 945 $F^2$ values, and 39 variables. It consists of chains of trans-edge-sharing OLa₄/₂ tetrahedra which are coordinated by [AsO₃]³⁻ units via the oxygen atoms.

Key words: Oxoarsenite, Rare Earth Compound, Crystal Structure