



Polymeric bis(phosphonomethyl-carboxylato)calcium(II) at 85 K.

Autorzy

Katarzyna Ślepokura

Tadeusz Lis

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Streszczenie

In the crystal structure of the title compound, alternatively called poly[calcium(II)-di- μ -carboxymethylphosphonato], $[\text{Ca}(\text{C}(2)\text{H}(4)\text{O}(5)\text{P})(2)](n)$ or $[\text{Ca}(\text{H}(2)\text{AP})(2)](n)$, one of the phosphonate O atoms of the phosphonocarboxylate monoanion lies nearly antiperiplanar (ap) to the carboxylic acid C atom. The phosphonate P atom is located -sc and +ac relative to the carboxylic acid O atoms. The overall structure has a layered architecture. The $\text{Ca}(2+)$ cations lie on a twofold axis and are bridged by the phosphonate O atoms to form chains along the c axis, giving layers parallel to (100). There are medium-strength O-H...O and C-H...O hydrogen-bonding interactions stabilizing the layers, and O-H...O hydrogen bonds connect adjacent layers.

Adres publiczny

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