

## Tetraethylammonium L-malate 1.36-hydrate

### ABSTRACT

The asymmetric unit of the title compound,  $C_8H_{20}N^+ \cdot C_4H_5O_5 \cdot 1.36H_2O$ , contains two independent ion pairs, with similar conformations, and three water molecules of crystallization, one water molecule having a site-occupancy factor of 0.721 (5). Intramolecular O—H...O hydrogen bonds, involving the hydroxy groups and an O atom of each carboxylate anion, generate five-membered rings involving S(5) ring motifs. In the crystal structure, molecules are linked together by water molecules through four-membered O—H...O—H...O—H interactions to form one-dimensional infinite chains along the a axis. Since the molecules are also linked into one-dimensional infinite chains along the b axis, molecular sheets parallel to the (001) plane are created. Overall, the crystal structure is stabilized by two intramolecular O—H...O hydrogen bonds, nine intermolecular O—H...O and ten C—H...O hydrogen bonds.

**Keyword:** Ionic liquid; Tetraethylammonium L-malate; single-crystal X-ray study.