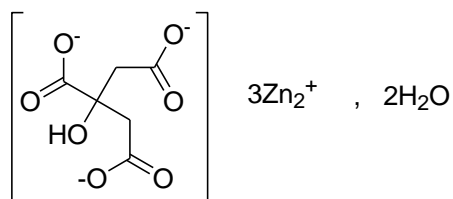


Zinc Citrate



$\text{C}_{12}\text{H}_{10}\text{O}_{14}\text{Zn}_3, 2\text{H}_2\text{O}$

Mol.Wt.610.4

Zinc Citrate is 2-Hydroxy-1,2,3-propanetricarboxylic acid zinc salt.

Zinc Citrate contains not less than 31.3 per cent of zinc, calculated on the dried basis.

Category. Trace element

Description. A white or almost white powder.

Identification

A. It gives reaction of Zinc salt (2.3.1).

B. It gives reaction (B) of citrate (2.3.1).

Tests

Chlorides (2.3.12). 0.5 g complies with the limit test for chlorides (500 ppm).

Sulphates (2.3.17). 0.3 g complies with the limit test for sulphates (500 ppm).

Heavy metals (2.3.13). 1.0 g complies with limit test for heavy metals, Method B (20 ppm).

Loss on drying (2.4.19). Not more than 1.0 per cent, determined on 1.0 g by drying in an oven at 105° for 2 hours.

Assay. Dissolve 0.35 g in 60 ml of water, add 10 ml of ammonia-ammonium chloride buffer, and titrate with 0.05 M disodium edetate using 0.1 ml of eriochrome black T as indicator, until a blue colour is obtained. Carry out a blank titration.

1 ml of 0.05 M disodium edetate is equivalent to 0.0654 g of Zn.

Storage. Store protected from moisture.

Solubility (2.4.26): Soluble in diluted hydrochloric acid, insoluble in water.