

Detection of Dimercaptosuccinic acid

Property: White Powder, garlic smel, it slightly soluble in methanol or ethanol, can not soluble in water.

Identification:

- 1) Take 0.2g of this product and add 2ml of water and sodium bicarbonate test solution to dissolve it and make it neutral. Add 1ml of lead acetate test solution to produce light yellow precipitation.
- 2) Take about 0.2g of this product, add 2ml of water and sodium hydroxide test solution for proper use, dissolve and show alkaline, and then add nitrosodium ferricyanide test solution, that is, show purple red.
- 3) The infrared absorption spectrum of this product should be consistent with the control spectrum.

Checking Acidity Take 1.0g of this product, add 20ml of water to make suspension, determine according to law, pH value should be 2.5-3.0

Loss on dry Take the product and dry it to constant weight at 105 °C. The weight loss should not exceed 0.1%.

Residue on ignition Take 1.0g of this product and check it according to law. The residue should not exceed 0.1%

Heavy metal Take the remaining residue under the burning residue, and check according to law, the metal content shall not exceed 10 parts per million.

Purity determination Take this product is about 0.05 g, precision said, with a plug in the conical flask, and anhydrous ethanol 30 ml dissolved, add 2 ml dilute nitric acid, precision and silver nitrate titration, the powerful jolt, the water bath for 2-3 minutes to heat, cold, filtration, washing with water cone and the precipitation not silver ion reaction to the lotion, merge the filtrate with lotion, with 2 ml of nitric acid and ammonium ferric sulfate indicating liquid 2 ml, with ammonium thiocyanate titration fluid (0.1 mol/L) titration, and use the result of the titration blank

test correction, Each 1 mL of silver nitrate titration solution (0.1 mol/L) corresponds to 4.556 $American \, C4H6O4S2$