L - Lactobionic acid R.... Litmus TS

Lactobionic acid R

4-O-β-D-Galactopyranosyl-D-gluconic acid; $C_{12}H_{22}O_{12}$.

A commercially available reagent of suitable grade.

Lanthanum nitrate (30 g/L) TS

Procedure. Dissolve 4.3 g of lanthanum nitrate R in 1 mL of nitric acid (~130 g/L) TS and sufficient water to produce 100 mL.

Lanthanum nitrate R

$La(NO_3)_3,6H_2O$. Contains not less than 97.0% of $La(NO_3)_3,6H_2O$.

Description. Colourless crystals; deliquescent.

Solubility. Freely soluble in water.

Assay. Dissolve about 0.75 g, accurately weighed, in 25 mL of water, add 3 mL of nitric acid (~130 g/L) TS, 3 g of methenamine R, about 20 mg of xylenol orange indicator mixture R and titrate with disodium edetate (0.05 mol/L) VS until the solution becomes pure yellow in colour. If fading of the colour of the indicator occurs towards the end of the titration more methenamine R should be added. Each mL of disodium edetate (0.05 mol/L) VS is equivalent to 21.65 mg of $La(NO_3)_3,6H_2O$.

Lead acetate (80 g/L) TS

A solution of lead acetate R in freshly boiled water containing about 80 g/L of $C_4H_6O_4Pb$ (approximately 0.25 mol/L).

Lead acetate paper R

Procedure. Dip white filter-paper into a mixture of 10 volumes of lead acetate (80 g/L) TS and 1 volume of acetic acid (~60 g/L) TS. Allow to dry and cut the paper into strips measuring 15 mm × 40 mm.

Storage. Lead acetate paper R should be kept in a well-closed container.

Lead acetate R

$C_4H_6O_4Pb,3H_2O$ (SRIP, 1963, p. 105).

Lead nitrate (0.05 mol/L) VS

Lead nitrate R, dissolved in water to contain 16.56 g of $Pb(NO_3)_2$ in 1000 mL.

Method of standardization. Ascertain the exact concentration of the 0.05 mol/L solution by diluting 25.0 mL with 200 mL of water, add 10 mL of ammonia buffer TS and about 20 mg of Mordant Black 11 indicator mixture R and titrate with disodium edetate (0.05 mol/L) VS.

Lead nitrate (0.1 mol/L) VS

Lead nitrate R, dissolved in water to contain 33.12 g of $Pb(NO_3)_2$ in 1000 mL.

Method of standardization. Ascertain the exact concentration of the solution following the method described under "Lead nitrate (0.05 mol/L) VS".

Lead nitrate (100 g/L) TS

A solution of lead nitrate R containing 100 g of $Pb(NO_3)_2$ per litre.

Lead nitrate paper R

Procedure. Dip strips of suitable filter-paper in a solution of 10 g of lead nitrate R in 100 mL of water and allow to dry.

Lead nitrate R

$Pb(NO_3)_2$ (SRIP, 1963, p. 107).

Lead subacetate TS

Contains not less than 16.7% *m/m* and not more than 17.4% *m/m* of Pb in a form corresponding approximately to the formula $C_8H_{14}O_{10}Pb_3$.

Procedure. Dissolve 40.0 g of lead acetate R in 90 mL of carbon-dioxide-free water R. Adjust the pH to 7.5 with sodium hydroxide (~400 g/L) TS. Centrifuge and use the clear supernatant solution.

Storage. Lead subacetate TS should be stored in a well-closed container.

Lead(IV) oxide R

PbO_2 (SRIP, 1963, p. 105).

Lead, dilute, PbTS.

One millilitre contains 10 µg of lead.

Procedure. Dilute 10 mL of strong lead PbTS with sufficient water to produce 100 mL.

Note: Dilute lead PbTS must be freshly prepared.

Lead, strong, PbTS

One millilitre contains 100 µg of lead.

Procedure. Dissolve 0.1598 g of lead nitrate R in 5 mL of nitric acid (~1000 g/L) TS and sufficient water to produce 1000 mL.

Levarterenol hydrogen tartrate R

$C_8H_{11}NO_3,C_4H_6O_6,H_2O$. Contains not more than 99% of $C_8H_{11}NO_3,C_4H_6O_6$, calculated with reference to the anhydrous substance.

Description. A white, or almost white, crystalline powder; odourless.

Solubility. Soluble in water; slightly soluble in ethanol (~750 g/L) TS; practically insoluble in ether R.

Specific optical rotation. Use a 50 mg/mL solution; $[\alpha]_D^{20\,°C}$ = -10° to -13°.

Water. Determine as described under *2.8 Determination of water by the Karl Fischer method*, Method A, using about 0.5 g of the substance; not less than 45 mg/g and not more than 58 mg/g.

Assay. Dissolve about 0.4 g, accurately weighed, in glacial acetic acid R and titrate with perchloric acid (0.1 mol/L) VS as described under *2.6 Non-aqueous titration*, Method A. Each mL of perchloric acid (0.1 mL/L) VS is equivalent to 31.93 mg of $C_8H_{11}NO_3,C_4H_6O_6$.

Limulus amoebocyte lysate

Reconstitute the lysate as stated on the label. For each batch confirm the stated sensitivity as prescribed under "Sensitivity of the lysate" in *3.4 Test for bacterial endotoxins*. The sensitivity of the lysate is defined as the lowest concentration of endotoxin which yields a firm gel under test conditions and is expressed in endotoxin units per millilitre.

Lincomycin hydrochloride R

Lincomycin hydrochloride of a suitable quality should be used.

Lithium carbonate R

Li_2CO_3.

Description. A white, granular powder; odourless.

Solubility. Sparingly soluble in water; very slightly soluble in ethanol (~750 g/L) TS.

Lithium carbonate/trinitrophenol TS

Procedure. Dissolve 0.25 g of lithium carbonate R and 0.5 g of trinitrophenol R in sufficient water to produce 100 mL.

Lithium chloride (10 g/L) TS

A solution of lithium chloride R containing about 10 g of LiCl per litre.

Lithium chloride R

LiCl.

Description. White, deliquescent crystals or granules.

Solubility. Freely soluble in water; soluble in acetone R, ethanol (~750 g/L) TS and ether R.

Storage. Store in a tightly closed container.

Lithium clavulanate R

Lithium clavulanate of a suitable quality should be used.

Lithium methoxide (0.1 mol/L) VS

Procedure. Dissolve 0.694 g of lithium R in 150 mL of methanol R and add sufficient toluene R to produce 1000 mL.

Method of standardization. Ascertain the exact concentration of the 0.1 mol/L solution in the following manner: dissolve about 0.15 g, accurately weighed, of benzoic acid R in 25 mL of dimethylformamide R and titrate with the lithium methoxide solution to a red end-point using quinaldine red/methanol TS as indicator as described under *2.6 Non-aqueous titration*, Method B. Each 12.21 mg of benzoic acid is equivalent to 1 mL of lithium methoxide (0.1 mol/L) VS. Lithium methoxide solutions must be standardized immediately before use.

Lithium perchlorate R

$LiClO_4$.

Description. Small crystals.

Solubility. Freely soluble in water; sparingly soluble in ethanol (~750 g/L) TS, acetone R, ether R and ethyl acetate R.

Lithium perchlorate/acetic acid TS

Procedure. Dissolve 10.64 g of lithium perchlorate R in sufficient glacial acetic acid R1 to produce 1000 mL.

Lithium R

Li.

Description. A soft metal whose freshly cut surface is silvery-grey, tarnishing rapidly in air.

Solubility. Reacts violently with water, yielding hydrogen and a solution of lithium hydroxide; soluble in methanol R, yielding hydrogen and a solution of lithium methoxide; practically insoluble in ether R.

Litmus paper R

(SRIP, 1963, p. 109).

Litmus R

(SRIP, 1963, p. 108).

Litmus TS

Procedure. Boil 10 g of litmus R with 40 mL of ethanol (~710 g/L) TS for 1 hour and pour away the clear liquid; repeat this operation twice with 30 mL of ethanol (~710 g/L) TS. Digest the washed litmus with 100 mL of water and filter.