N - N-(1-Naphthyl)ethylenediamine hydrochloride (1 g/L) TS... 1-Nitroso-2-naphthol-3,6-disodium disulfonate R

N-(1-Naphthyl)ethylenediamine hydrochloride (1 g/L) TS

A solution of *N*-(1-naphthyl)ethylenediamine hydrochloride R containing about 1 g of $C_{12}H_{14}N_2$,2HCl per litre.

N-(1-Naphthyl)ethylenediamine hydrochloride (5 g/L) TS

A solution of *N*-(1-naphthyl)ethylenediamine hydrochloride R containing about 5 g of $C_{12}H_{14}N_2$,2HCl per litre.

N-(1-Naphthyl)ethylenediamine hydrochloride R

$C_{12}H_{14}N_2$,2HCl (SRIP, 1963, p. 124).

N-(1-Naphthyl)ethylenediamine hydrochloride/1-propanol TS

Procedure. To 7 mL of *N*-(1-naphthyl)ethylenediamine hydrochloride (1 g/l) TS add 3 mL of 1-propanol R.

N-(1-Naphthyl)ethylenediamine hydrochloride/propylene glycol TS

Procedure. Dissolve 0.1 g of *N*-(1-naphthyl)ethylenediamine hydrochloride R in 30 mL of water and dilute to 100 mL with propylene glycol R.

Note. N -(1-Naphthyl)ethylenediamine hydrochloride/propylene glycol TS must be freshly prepared.

N,N'-bis(propan-2-yl)ethane-1,2-diamine R

$C_8H_{20}N_2$

Molecular weight. 144.3.

Other name. N,N’-Bis(1-methylethyl)-1,2-ethanediamine; N,N’-Diisopropylethylenediamine.

Description. Colourless or yellowish, hygroscopic liquid, corrosive, flammable.

Relative density d_{20}^{20}. About 0.798.

Boiling point. About 170 °C.

Naphthalene-1,3-diol R

1,3-Naphthalenediol; $C_{10}H_8O_2$.

Description. Colourless crystals.

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

Melting temperature. About 124 °C.

Naphthalene-1,3-diol/ethanol TS

Procedure. Dissolve 0.2 g of naphthalene-1,3-diol R in sufficient ethanol (~750 g/L) TS to produce 100 mL.

2-Naphthol R

[β-naphthol R] $C_{10}H_8O$ (SRIP, 1963, p. 122).

1-Naphthol R

$C_{10}H_8O$.

Description. Colourless crystals or a white, crystalline powder; odour, characteristic.

Solubility. Soluble in 5 parts of ethanol (~750 g/L) TS (may form a slightly opalescent, colourless or almost colourless solution).

Melting range. 93–96 °C.

Sulfated ash. Not more than 0.5 mg/g.

1-Naphthol TS1

Procedure. Dissolve 0.10 g of 1-naphthol R in 3 mL of sodium hydroxide (~150 g/L) TS and dilute with sufficient water to produce 100 mL.

Note: 1-Naphthol TS1 must be prepared immediately before use.

2-Naphthol TS1

Procedure. Dissolve 5 g of 2-naphthol R, freshly recrystallized, in 40 mL of sodium hydroxide (~80 g/L) TS and add sufficient water to produce 100 mL.

Note: 2-Naphthol TS1 must be freshly prepared.

1-Naphtholbenzein R

$C_{27}H_{20}O_3$.

Description. A reddish-brown powder.

Solubility. Practically insoluble in water; soluble in ethanol (~750 g/L) TS, benzene R, ether R and glacial acetic acid R.

1-Naphtholbenzein/acetic acid TS

Procedure. Dissolve 0.2 g of 1-naphtholbenzein R in sufficient glacial acetic acid R to produce 100 mL.

1-Naphthol/ethanol TS

Procedure. Dissolve 0.05 g of 1-naphthol R in 60 mL of ethanol (~750 g/L) TS and add sufficient water to produce 100 mL.

Neutral red R

C.I. 50040; C.I. Basic Red; $C_{15}H_{17}ClN_4$ (SRIP, 1963, p. 124).

Neutral red/ethanol TS

Procedure. Dissolve 0.1 g of neutral red R in sufficient ethanol (~375 g/L) TS to produce 100 mL.

Ninhydrin/2-propanol (5g/L) TS

Procedure. Prepare a 5 g/L solution of ninhydrin R in 2-propanol R.

Ninhydrin/ethanol (1 g/ 60 mL) TS

Dissolve 1.0 g of ninhydrin R in 50 mL of dehydrated ethanol R and add 10 mL of glacial acetic acid R.

Ninhydrin R

See under “Triketohydrindene hydrate R”.

Nitric acid (~1000 g/L) TS

[nitric acid (70%) R] (SRIP, 1963, p. 125); *d*~1.41.

Nitric acid (~1000 g/L), cadmium-free and lead-free, TS

[nitric acid, cadmium-free and lead-free (70%) R].

Nitric acid (~200 g/L), cadmium-free and lead-free, TS

Procedure. Dilute 200 mL cadmium-free and lead-free nitric acid (~1000 g/L) TS with water R to produce 1000 mL.

Nitric acid (~130 g/L) TS

Procedure. Dilute 130 mL of nitric acid (~1000 g/L) TS with sufficient water to produce 1000 mL (approximately 2 mol/L); *d*~1.07.

Nitric acid (0.05 mol/L) VS

Nitric acid (~1000 g/L) TS diluted with water to contain 3.151 g of HNO_3 in 1000 mL.

Method of standardization. Ascertain the exact concentration of the solution by following the method described under nitric acid (1 mol/L) VS.

Nitric acid (1 mol/L) VS

Nitric acid (~1000 g/L) TS diluted with water to contain 63.10 g of HNO_3 in 1000 mL.

Method of standardization. Ascertain the exact concentration of the 1 mol/L solution in the following manner: Dissolve 2 g of anhydrous sodium carbonate R in 50 mL of water and titrate with the nitric acid solution using 0.1 mL of methyl orange/ethanol TS as indicator until the solution just becomes reddish yellow. Boil for 2 minutes; the solution reverts to yellow. Cool and continue the titration until the reddish yellow colour is restored. Each mL of nitric acid (1 mol/L) VS is equivalent to 0.0530 g of Na_2CO_3.

Nitric acid (15 g/L) TS

Nitric acid (~1000 g/L) TS diluted with water to contain 15.0 g/l of HNO_3.

Nitric acid (3 g/L) TS

Nitric acid (~1000 g/L) TS diluted with water to contain 3.0 g/L of HNO_3.

Nitric acid, fuming, R

HNO_3 (SRIP, 1963, p. 126); *d*~1.5.

4-Nitroaniline R

[p-nitroaniline R] $C_6H_6N_2O_2$ (SRIP, 1963, p. 127).

4-Nitroaniline TS1

Procedure. Dissolve 5 g of 4-nitroaniline R in sufficient hydrochloric acid (1 mol/l) VS to produce 1000 mL.

4-Nitroaniline TS2

Procedure. Dissolve 0.4 g of 4-nitroaniline R in 60 mL of hydrochloric acid (1 mol/L) VS, cool to 15 °C and add sufficient sodium nitrite (100 g/L) TS until 1 drop of the mixture turns starch/iodine paper R blue.

Note: 4-Nitroaniline TS2 must be freshly prepared.

Nitrobenzene R

$C_6H_5NO_2$ (SRIP, 1963, p. 128).

4-Nitrobenzoyl chloride R

[p-nitrobenzoyl chloride R] $C_7H_4ClNO_3$ (SRIP, 1963, p. 128).

Nitrogen monoxide R

NO.

Nitric oxide, washed with water.

A commercially available gas of suitable grade.

Nitrogen monoxide and nitrogen dioxide detector tube

A cylindrical, sealed glass tube containing adsorbent filters and suitable supports for an oxidizing layer Cr(VI) salt and the diphenyl-benzidine indicator. The minimum value indicated is 5 µl/L or less, with a relative standard deviation of at most ±15%. Tubes can be verified with a calibration gas containing the appropriate impurity if a negative result is obtained.

Nitrogen R

N_2 (SRIP, 1963, p. 129).

Nitrogen for chromatography R

Contains not less than 99.95% v/v of N_2.

Nitrogen, oxygen-free, R

Nitrogen R which has been freed from oxygen by passing it through alkaline pyrogallol TS.

Nitromethane R

CH_3NO_2.

Description. A colourless, oily liquid.

Miscibility. Miscible with water, ethanol (~750 g/L) TS, ether R and di-methylformamide R.

Mass density. ρ_{20} = about 1.13 kg/L.

Refractive index. $n_D^{22} = \text{about} 1.380$.

Boiling temperature. About 101 °C.

Nitrophenanthroline R

5-Nitro-1,10-phenanthroline; $C_{12}H_7N_3O_2$.

Description. A white powder; odourless.

Solubility. Soluble in water.

Melting range. 198–200 °C.

Nitrophenanthroline TS

Procedure. Dissolve 0.15 g of nitrophenanthroline R in 15 mL of freshly prepared ferrous sulfate (7 g/L) TS.

1-Nitroso-2-naphthol-3,6-disodium disulfonate (2 g/L) TS

A solution of 1-nitroso-2-naphthol-3,6-disodium disulfonate R containing about 2 g of $C_{10}H_5NNa_2O_8S_2$ per litre.

1-Nitroso-2-naphthol-3,6-disodium disulfonate R

[1-nitroso-2-naphthol-3,6-disodium sulfonate R]. $C_{10}H_5NNa_2O_8S_2$ (SRIP, 1963, p. 129).

1-Nitroso-4-methyl piperazine R

A commercially available substance of suitable grade.

1-Nitroso-4-methyl piperazine-d4 R

A commercially available substance of suitable grade.

N,N,N',N'-tetramethyl-2,2'-oxybis(ethaneamine) R

$C_8H_{20}N_2O$

Molecular weight. 160.3.

Other name. Bis(2-dimethylaminoethyl) ether; 2,2'-Oxybis(N,N-dimethylethylamine).

Description. Colourless, corrosive liquid.

Relative density d_{20}^{20}. About 0.85.