

Tris Base (Trizma®)

Meets USP-NF, EP and BP testing specifications

Product Code: TC072M

Product Description :

Molecular weight: 121.14

Molecular formula: $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$

CAS No.: 77-86-1

Synonym: Tromethamine; Tris(hydroxymethyl)aminomethane; Trometamol

Quality Control:

Appearance (USP)

White crystalline powder

Appearance (EP, BP)

A white or almost white crystalline powder, or colourless crystals

Solubility (USP)

Freely soluble in water

Solubility (EP, BP)

Freely soluble in water, sparingly soluble in alcohol, very slightly soluble in ethyl acetate

pH (USP, EP, BP)

10.00 - 11.50 (5% in water at 25°C)

Appearance of solution (EP, BP)

5% solution in water is clear and colourless.

Identification A : FTIR (USP)

Matches with the standard pattern

Identification A (EP, BP)

5% solution in water is strongly alkaline

Identification B (USP)

A yellow colour is produced

Identification B : Melting range (EP, BP)

168° - 174°C

Identification C (USP)

The colour changes from light yellow to orange

Identification C : FTIR (EP, BP)

Matches with the standard pattern

Identification D : TLC (EP, BP)

The principal spot in the chromatogram obtained with test solution (b) is similar in position, colour and size to the principal spot in the chromatogram obtained with reference solution (a)

Melting range (USP)

168° - 172°C

Melting range (EP, BP)

168° - 174°C

Chloride (EP, BP)

<= 0.01%

Residue on ignition (USP)

<= 0.1%

Iron (EP, BP)

<= 0.001%

Related substances : TLC (EP, BP)

Any spot in the chromatogram obtained with test solution (a), apart from the principal spot, is not more intense than the spot in the chromatogram obtained with reference solution (b) (1.0%)

Sulphated ash (EP, BP)

<= 0.1%

Bacterial endotoxins (EP, BP)

< 0.03 IU/mg

Loss on drying (at 105°C, 3hr) (USP)

<= 1.0%

Loss on drying (at 105°C, 2hr) (EP, BP)

<= 0.5%

Assay (HCl T, on dry basis) (USP)

99.00 - 101.00%

Assay (HCl T, dried substance) (EP, BP)

99.00 - 100.50%

Storage and Shelf Life:

Store below 30°C away from bright light.

Shelf life is 48 months.

Use before expiry date given on the product label.

Disclaimer :

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