

Sodium chloride

Meets USP-NF, EP, BP, JP and IP testing specifications

Product Code: TC046M

Product Description :

Molecular weight: 58.44

Molecular formula: NaCl

CAS No.: 7647-14-5

Quality Control:

Appearance (EP, BP)

White or almost white crystalline powder, or colourless crystals or white or almost white pearls

Appearance (USP)

Colourless, cubic crystals or white crystalline powder.

Appearance (JP)

Colourless or white crystals or crystalline powder

Appearance (IP)

White or colourless crystals or a white crystalline powder

Solubility (EP, BP)

Freely soluble in water, practically insoluble in anhydrous ethanol

Solubility (USP)

Freely soluble in water, soluble in glycerin, slightly soluble in alcohol

Solubility (JP)

Freely soluble in water, and practically insoluble in ethanol (99.5%)

Solubility (IP)

Freely soluble in water and slightly more soluble in boiling water, practically insoluble in ethanol

Identification A (USP, JP)

Reaction for sodium

Identification A (EP, BP, IP)

Reaction (a) for chlorides

Identification B (USP, JP)

Reaction for chlorides

Identification B (EP, BP, IP)

Reaction for sodium salts

Appearance of solution (USP, EP, BP, IP)

20% Solution in water is clear and colourless.

Clarity & colour of solution (JP)

20% Solution in water is clear and colourless.

Acidity or alkalinity (USP, EP, BP, IP)

≤ 0.5 mL of 0.01M hydrochloric acid or 0.01M sodium hydroxide is required to change the colour of this solution

Acidity or alkalinity (JP)

The colour of the solution is blue

Arsenic (USP, EP, BP, IP)

$\leq 0.0001\%$

Arsenic (JP)

$\leq 0.0002\%$

Bromide, UV spectroscopy (USP, EP, BP, IP)

$\leq 0.01\%$

Bromide (JP)

The absorbance at 590nm of the sample solution is not more than that of standard solution

Ferrocyanide (USP, EP, BP, JP, IP)

No blue colour develops within 10 min.

Phosphate (USP, EP, BP)

$\leq 0.0025\%$

Phosphate (JP)

The colour of the solution is not darker than the control solution

Heavy metals (IP)

$\leq 0.0005\%$

Heavy metals (JP)

$\leq 0.0003\%$

Iron (USP, EP, BP)

$\leq 0.0002\%$

Iron (JP)

The solution has not more colour than the control solution

Iron (IP)

$\leq 0.002\%$

Sulphate (USP, EP, BP)

$\leq 0.02\%$

Sulphate (JP)

Any turbidity produced does not more than that produced in the control solution

Sulphate (IP)

≤ 0.03%

Aluminium (USP, EP, BP, IP)

≤ 0.00002%

Barium (USP)

Any opalescence in the test solution is not more intense than that in the reference solution

Barium (EP, BP)

Any opalescence in the solution is not more intense than that in the mixture of 5 mL of 20% in water and 7 mL of distilled water

Barium (JP)

The solution has not more turbidity than the control solution

Barium (IP)

No turbidity is produced within 2hr

Iodides (USP, EP, BP)

No blue colour is observed

Iodide (JP)

A blue colour does not appear

Iodide (IP)

No blue colour after 5 min.

Potassium (USP, EP, BP)

≤ 0.05%

Potassium (IP)

≤ 0.10%

Nitrites, UV-Spectroscopy (USP, EP, BP)

Absorbance is ≤ 0.01 at 354nm

Calcium and magnesium (IP)

≤ 0.005%

Magnesium & alkaline-Earth metals (USP, EP, BP)

≤ 0.01% (Calculated as Ca)

Magnesium & alkaline-Earth metals (JP)

The colour of the solution is blue

Loss on drying (at 105°C, 3hr) (IP)

≤ 1.0%

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

≤ 0.5%

Assay (AT, on dried basis) (USP, EP, BP, JP, IP)

99.00 -100.50%

Bacterial endotoxin (EP, BP, IP)

≤ 5.0 IU/g

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.

Revision : 05/2023

Disclaimer :

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