

# Ammonium chloride

Meets USP-NF, EP, BP and IP testing specification

**Product Code: TC092M**

## Product Description :

Molecular weight : 53.49

Molecular formula:  $\text{NH}_4\text{Cl}$

CAS No.: 12125-02-9

## Quality Control:

### Appearance (USP)

Colourless crystals or white fine or coarse, crystalline powder, hygroscopic

### Appearance (EP, BP)

White or almost white, crystalline powder or colourless crystals

### Appearance (IP)

Colourless crystals or a white, crystalline powder

### Solubility (USP)

Freely soluble in water and in glycerin, and even more so in boiling water, sparingly soluble in alcohol

### Solubility (EP, BP)

Freely soluble in water

### Solubility (IP)

Freely soluble in water; sparingly soluble in ethanol (95%)

### Identification (USP, IP)

Reactions for ammonium and chloride

### Identification A (EP, BP)

Reaction for chlorides

### Identification B (EP, BP)

Reaction for ammonium salts

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

10% solution in water is clear and colourless

### pH (5% in water at 25°C) (USP)

4.60 - 6.00

### pH (5% in water at 25°C) (IP)

4.50 - 6.00

### Acidity or alkalinity (EP, BP)

$\leq 0.5\text{mL}$  of 0.01M HCl or 0.01M NaOH is required to change the colour of the indicator

### Residue on ignition (USP)

$\leq 0.1\%$

### Heavy metals (IP)

$\leq 0.001\%$

### Arsenic (IP)

$\leq 0.0004\%$

### Iron (EP, BP, IP)

$\leq 0.002\%$

### Calcium (EP, BP, IP)

$\leq 0.02\%$

### Sulphates (EP, BP, IP)

$\leq 0.015\%$

### Bromide and iodides (EP, BP)

The chloroform layer remains colourless

### Limit of thiocyanate (USP)

No orange-red colour is produced

### Thiocyanate (IP)

No red colour is produced

### Sulphated ash (EP, BP, IP)

$\leq 0.1\%$

### Loss on drying (USP)

$\leq 0.5\%$  (over silica gel, 4hr)

### Loss on drying (EP, BP, IP)

$\leq 1.0\%$  (at 105°C, 2hr)

### Assay (AT, dried basis) (USP)

99.50 - 100.50%

### Assay (NaOH T, dried substance) (EP, BP, IP)

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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