

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| CP98.5   | 100 g     | plastic |
| CP98.1   | 500 g     | plastic |
| CP98.2   | 1 kg      | plastic |
| CP98.4   | 2.5 kg    | plastic |
| CP98.3   | 5 kg      | plastic |

## Ammonium carbonate

≥30,5 % NH<sub>3</sub>, extra pure

This product is a mixture of variable proportions of ammonium bicarbonate and ammonium carbamate.

CH<sub>6</sub>N<sub>2</sub>O<sub>2</sub> · CH<sub>5</sub>NO<sub>3</sub> (1:1)

CAS No. 10361-29-2 · EC no. 233-786-0

WGK 1

 **Danger** H302-H315-H318

### Guarantee analysis

|                             |           |
|-----------------------------|-----------|
| Assay (NH <sub>3</sub> )    | ≥30,5 %   |
| Chloride (Cl)               | ≤0,005 %  |
| Sulphate (SO <sub>4</sub> ) | ≤0,005 %  |
| Non volatile matter         | ≤0,01 %   |
| Heavy metals (as Pb)        | ≤0,0005 % |
| Arsenic (As)                | ≤0,0001 % |
| Lead (Pb)                   | ≤0,0001 % |
| Iron (Fe)                   | ≤0,0005 % |
| Mercury (Hg)                | ≤0,0001 % |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| CN94.1   | 500 g     | plastic |
| CN94.2   | 1 kg      | plastic |
| CN94.4   | 2.5 kg    | plastic |
| CN94.3   | 5 kg      | plastic |

## Ammonium cerium(IV) nitrate

► Cerium(IV) ammonium nitrate see page 149

## Ammonium cerium(IV) sulphate dihydrate

Cerium(IV) ammonium sulphate dihydrate  
(NH<sub>4</sub>)<sub>4</sub>Ce(SO<sub>4</sub>)<sub>4</sub> · 2 H<sub>2</sub>O  
M 632,55 g/mol  
CAS No. 10378-47-9 · EC no. 231-567-4  
WGK 1

## Ammonium cerium(IV) sulphate dihydrate

≥99 %, p.a.

Oxidant reagent, for cerimetric titrations

### Guarantee analysis

|                              |          |
|------------------------------|----------|
| Assay                        | ≥99,0 %  |
| Chloride (Cl)                | ≤0,01 %  |
| Phosphate (PO <sub>4</sub> ) | ≤0,02 %  |
| Iron (Fe)                    | ≤0,005 % |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| 4386.4   | 25 g      | plastic |
| 4386.5   | 50 g      | plastic |
| 4386.1   | 100 g     | plastic |
| 4386.2   | 250 g     | plastic |
| 4386.3   | 500 g     | plastic |

## Ammonium chloride

Salmiac · Salmiac salt  
NH<sub>4</sub>Cl · D 1,53 g/cm<sup>3</sup> · mp 338 °C  
M 53,49 g/mol  
CAS No. 12125-02-9 · EC no. 235-186-4  
WGK 1

 **Warning** H302-H319

## Ammonium chloride

ROTI®METIC 99,999 % (5N)

### Type analysis

Assay (metals basis) ..... ≥99,999 %

Chemical analysis (ICP, AAS): up to 60 specified trace metal impurities in ppm range.

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| 5050.1   | 50 g      | plastic |
| 5050.2   | 100 g     | plastic |

## Ammonium chloride

≥99,7 %, p.a., Ultra Quality

Reagent for photography, buffer substance, molecularbiology, mixtures cryogens.

### Guarantee analysis

|                                      |            |
|--------------------------------------|------------|
| Assay (arg.)                         | ≥99,7 %    |
| pH-value (5 % solution)              | 4,5-5,5    |
| Water (KF)                           | ≤0,1 %     |
| Appearance of solution               | complies   |
| In H <sub>2</sub> O insoluble matter | ≤0,005 %   |
| Acidity or alkalinity                | complies   |
| Ash content (as SO <sub>4</sub> )    | ≤0,02 %    |
| Pyridine and homologues              | ≤0,001 %   |
| Bromide and Iodide (Br,I)            | complies   |
| Phosphate (PO <sub>4</sub> )         | ≤0,0002 %  |
| Nitrate (NO <sub>3</sub> )           | ≤0,001 %   |
| Sulphate (SO <sub>4</sub> )          | ≤0,002 %   |
| Iodide (I)                           | ≤0,001 %   |
| Heavy metals (as Pb)                 | ≤0,0005 %  |
| Arsenic (As)                         | ≤0,00005 % |
| Lead (Pb)                            | ≤0,0001 %  |
| Cadmium (Cd)                         | ≤0,0001 %  |
| Calcium (Ca)                         | ≤0,001 %   |
| Chromium (Cr)                        | ≤0,0005 %  |
| Iron (Fe)                            | ≤0,0002 %  |
| Potassium (K)                        | ≤0,005 %   |
| Cobalt (Co)                          | ≤0,0005 %  |
| Copper (Cu)                          | ≤0,0005 %  |
| Magnesium (Mg)                       | ≤0,0005 %  |
| Nickel (Ni)                          | ≤0,0005 %  |
| Mercury (Hg)                         | ≤0,0001 %  |
| Zinc (Zn)                            | ≤0,0005 %  |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| K298.7   | 100 g     | plastic |
| K298.1   | 500 g     | plastic |
| K298.2   | 1 kg      | plastic |
| K298.3   | 2.5 kg    | plastic |
| K298.4   | 5 kg      | plastic |
| K298.6   | 10 kg     | plastic |
| K298.5   | 25 kg     | plastic |

## Ammonium chloride

≥99,5 %, Ph. Eur., USP, BP

### Guarantee analysis

|                                      |              |
|--------------------------------------|--------------|
| Assay (argentometric, dry substance) | 99,5-100,5 % |
| Identity                             | complies     |
| pH value (5 % in water)              | 4,6-6,0      |
| Appearance of solution               | complies     |
| Loss on drying (2 h, 105 °C)         | ≤0,5 %       |
| Ash content (as SO <sub>4</sub> )    | ≤0,1 %       |
| Acid or alkaline react. substances   | complies     |
| Bromide and Iodide (Br,I)            | complies     |
| Phosphate (PO <sub>4</sub> )         | ≤0,002 %     |
| Sulphate (SO <sub>4</sub> )          | ≤0,005 %     |
| Thiocyanate (SCN)                    | complies     |
| Arsenic (As)                         | ≤0,0001 %    |
| Lead (Pb)                            | ≤0,001 %     |
| Calcium (Ca)                         | ≤0,02 %      |
| Iron (Fe)                            | ≤0,002 %     |
| Copper (Cu)                          | ≤0,001 %     |
| Magnesium (Mg)                       | ≤0,005 %     |
| Nickel (Ni)                          | ≤0,001 %     |
| Heavy metals (as Pb)                 | ≤0,001 %     |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| P726.1   | 500 g     | plastic |
| P726.2   | 1 kg      | plastic |
| P726.4   | 2.5 kg    | plastic |
| P726.3   | 5 kg      | plastic |
| P726.6   | 10 kg     | plastic |
| P726.5   | 25 kg     | plastic |

## Ammonium chloride

≥99 %, cryst.

### Type analysis

|                            |                     |
|----------------------------|---------------------|
| Appearance                 | fine white crystals |
| Assay (NH <sub>4</sub> Cl) | ≥99,0 %             |
| Iron (Fe)                  | ≤0,0003 %           |
| Sodium chloride (NaCl)     | ≤0,2 %              |
| Water (KF)                 | ≤0,1 %              |
| Ash                        | ≤0,25 %             |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| 5470.1   | 1 kg      | plastic |
| 5470.4   | 2.5 kg    | plastic |
| 5470.2   | 5 kg      | plastic |
| 5470.3   | 10 kg     | plastic |
| 5470.5   | 25 kg     | plastic |

## Ammonium citrate, dibasic

► di-Ammonium hydrogen citrate see page 53

## tri-Ammonium citrate

Citric acid triammonium salt · Ammonium citrate tribasic  
C<sub>6</sub>H<sub>17</sub>N<sub>3</sub>O<sub>7</sub> · D 1,48 g/cm<sup>3</sup>  
M 243,22 g/mol  
CAS No. 3458-72-8 · EC no. 222-394-5  
WGK 1

 **Warning** H315-H319-H335

## tri-Ammonium citrate

≥97 %, pure

### Type analysis

|                                    |          |
|------------------------------------|----------|
| Assay (titr.)                      | ≥97,0 %  |
| pH value (5 % in H <sub>2</sub> O) | 7,0-8,0  |
| Chloride (Cl)                      | ≤0,005 % |
| Sulphate (SO <sub>4</sub> )        | ≤0,01 %  |
| Iron (Fe)                          | ≤0,005 % |

| Art. No. | Pack Qty. | Pack.   |
|----------|-----------|---------|
| 9488.1   | 100 g     | plastic |
| 9488.2   | 500 g     | plastic |
| 9488.3   | 1 kg      | plastic |

## Ammonium citrate tribasic

► tri-Ammonium citrate see page 51

## Ammonium dihydrogene phosphate matrix modifier solution

► Ammonium dihydrogen phosphate matrix modifier solution see page 408  
► Ammonium dihydrogen phosphate matrix modifier solution see page 408