Buffer Salts

About these applications?

Inorganic salts with excellent buffering capacity are used for:

- **Calibrating pH-meters**
- **Adjusting the pH of aqueous solutions in order to:**
  - Optimise the yields of chemical syntheses (e.g. pharmaceutical active substances)
  - Optimise the conditions in chromatographic separations
  - Optimise the growth conditions of bacteria (biotechnology)

Fields of application

- **Biochemistry**
  - Synthesis, biotechnological production
  - Separation techniques
- **Pharmaceutical industry**
  - Biotechnological production and fermentation processes
  - Separation techniques

Which reagents are used?

Inorganic salts with a good buffer effect are e.g.:

- **Phosphates**
- **Citrates**
- **Acetates**
- **Borates**

The following inorganic salts are included in Merck's programme:

Cat. No.	Designation
101116	Ammonium acetate GR for analysis, ACS
101126	Ammonium dihydrogen phosphate GR for analysis, ACS
101154	di-Ammonium hydrogen citrate GR for analysis, ACS
104873	Potassium dihydrogen phosphate GR for analysis, ISO
105099	di-Potassium hydrogen phosphate trihydrate GR for analysis
105104	di-Potassium hydrogen phosphate anhydrous GR for analysis, ACS
108087	Potassium sodium tartrate tetrahydrate GR for analysis, ACS, ISO
106268	Sodium acetate anhydrous GR for analysis, ACS

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106267	Sodium acetate trihydrate GR for analysis, ACS, ISO
106448	tri-Sodium citrate dihydrate GR for analysis, ACS, ISO
106346	Sodium dihydrogen phosphate monohydrate GR for analysis, ACS
106591	tetra-Sodium diphosphate decahydrate GR for analysis, ACS
106580	di-Sodium hydrogen phosphate dihydrate GR for analysis
106575	di-Sodium hydrogen phosphate heptahydrate GR for analysis ACS
106586	di-Sodium hydrogen phosphate anhydrous GR for analysis, ACS
106578	tri-Sodium phosphate dodecahydrate GR for analysis, ACS

100264	Formic acid 98-100 % GR for analysis, ACS
100165	Boric acid GR for analysis, ACS, ISO
100244	Citric acid monohydrate GR for analysis, ACS, ISO
100063	Acetic acid 100 % GR for analysis, ACS, ISO

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