

## What do these terms mean?

### **Buffering**

Alkaline reserves are indicated by the testing criteria contained in DIN ISO 9706 and DIN ISO 16245 standards. The minimum value of 2% set out (normally found in calcium carbonate) determines the minimum amount of substances that act to neutralize acid. These are also known as calcium carbonate buffers.

Cartons and boxes that are guaranteed not to age can protect collected documents against damaging atmospheric substances and should also dampen contained documents against fluctuations in room temperature. When covering archival materials, the most important thing is not that the coverings are age-resistant themselves, but that they can absorb the damaging substances contained in water and air vapor and can transform these vapors from reactive to non-reactive.

Harmful substances such as sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), chlorine compounds, hydrocarbons and also fine dust particles of various compositions can be passed through the ambient atmosphere to the document collections that need protection. However, harmful substances can only reach them if they're able to pass through the covering material.

Carton coverings should be designed in a way that ensures sufficient mechanical protection of the collected materials and prevent entry of the finest and partially catalytic particles. As well, the composition of materials in the carton coverings should be able to absorb pollutants in gas-form.