

## **Potassium Bicarbonate: Information on recommended storage conditions and stability**

For consistent product quality, potassium bicarbonate is recommended to be stored under specific conditions: (i) tightly sealed (packaging), (ii) dry (exclusion of humidity) and (iii) mild temperature.

Storage under tightly sealed and dry conditions is very important due to the hygroscopic property of Potassium Bicarbonate. The material will attract and hold water molecules from the surrounding environment when exposed to humidity and even by diffusion through a tightly sealed foil packaging. This effect leads to an increase of water content over time causing a slight decrease of the total alkalinity. The water uptake can lead to caking effects influencing the flowability of the product. However, the chemical composition of Potassium Bicarbonate remains unchanged as no chemical reaction is taking place..

The recommended storage temperature is a constant temperature of around 20°C (68°F). At least from temperatures above 100°C, chemical decomposition of Potassium Bicarbonate will start under the release of carbon dioxide. At 198°C potassium bicarbonate is completely chemically decomposed.

If Potassium Bicarbonate would be stored under theoretical perfect conditions (at 20°C, completely dry, no chemical impact), which is not possible even in case of a tightly sealed foil packaging, it would have an infinite shelf life. However, to be aware of the current product quality under recommended storage conditions and irrespective of the contractual warranty period, a retest of total alkalinity and water content is recommended immediately prior to use and in particular if Potassium Bicarbonate has been stored under the recommended storage conditions for a period of 2 years or more.

Please feel free to contact your customer service representative in case of additional questions regarding storage conditions and stability.

### **Disclaimer**

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We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming product and to verify the suitability of our products for the use (including but not limited to storage) intended by customer. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer.

I Version 1.0.: March 2017