

Product Information

K-pron®

DESCRIPTION

K-pron® is a pure form of potassium carbonate hydrate with a minimum content of 56 % potassium on a dry matter basis (calculated as a non-hydrated form).

K-pron® delivers potassium, the principal intracellular cation of most tissues, in a highly concentrated form. Potassium maintains the osmotic potential within cells and is an active component of nerve impulse transmission. It is important for enzyme reactions in cellular metabolism and crucial in cardiac, skeletal and smooth muscle function. Potassium maintains kidney function and controls the excretion of urine and faeces. In rations of early lactating dairy cows, the potassium balance is likely to be negative. The mineral is a component of the DCAD calculation (Dietary Cation-Anion Difference). Lactation diets can benefit from a more positive DCAD with increased feed intake and higher production what can easily be achieved by adding K-pron®. In conditions of heat stress, a higher level of potassium in the diet as well as a higher buffering capacity is indicated.

FEEDING INSTRUCTIONS

K-pron® is added to the diets of dairy cows according to the potassium content of the feeds relative to the requirements of the animals for potassium in the respective phase in lactation. Typical daily inclusion ranges from 150 to 250 g per cow.

Specified value

Potassium Content (calculated*)	56 % (min) on a dry matter basis
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* from Total Alkalinity Assay 83 % (min.)

APPEARANCE

White crystals
Bulk density: 1,200 kg/m³ ± 10 %
Angle of repose: 35° ± 15 %
Particle size distribution: max. 5 % > 1,400 µm
max. 5 % < 100 µm
Solubility: max. 1,680 g/l water at 20 °C

MOLECULAR DATA

Molecular formula: K₂CO₃ · 1.5 H₂O
Molecular weight: 165.2 g/mol

PRODUCTION

K-pron® is manufactured by carbonation of potassium hydroxide solution.

K-pron® is produced having safety and a high feed quality in mind. This is enabled by an implemented quality system with HACCP concept that conforms to feed hygienic requirements of the EU. Therefore, from the beginning, corresponding quality and safety is produced into K-pron®.

TYPICAL VALUE

Characteristic Value

Potassium (K)	56 % on a dry matter basis
DCAD value	+ 12.000 meq/kg as is + 14.400 meq/kg DM

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PROCESSING

K-pron® can be included in mineral and compound feeds by common technical procedures. Its technical properties guarantee homogeneous mixability and stability against demixing.

STORAGE AND STABILITY

K-pron® should be kept in unopened original packaging in a cool and dry place, with no direct exposure to the sun. Storage conditions of 5 – 30 °C and 40 – 75 % rel. humidity are recommended.

Under these conditions, its active content is guaranteed for 2 years from the first day of the month of manufacture. The manufacturing date is printed on the package.

REGULATORY AFFAIRS

25 kg net plastic / poly bag
1,000 kg net bulk bag / FIBC
Full bulk shipment

CAS-No.: 6381-79-9

Customs tariff number: 283640

According to the European Feed Law, K-pron® is listed in the catalogue of feed materials as potassium carbonate (11.5.3) and labeled correspondingly.

In general potassium carbonate is globally well accepted as feed material. However, the individual registration status and covered species can be country specific. Please contact your Evonik expert for more information.

K-pron® is not subject to dangerous goods regulations.

SAFETY AND ENVIRONMENT

K-pron® can be handled safely. However, in its pure form, it is classified as hazardous substance. Please consider the handling instruction of the safety data sheet.

For additional information, please contact us directly.

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