



PRODUCT INFO
& DATASHEET

SICO BOR-ANS

26% N + 13% S + 0.3% B - Granular – EC Fertiliser

Ammonium Nitrate Sulphate with Boron
also called Ammonium Sulphate Nitrogen (ASN)
Sulfonitrate d'Ammoniaque (granulaire) avec Bore

1. TYPICAL ANALYSIS / ANALYSE TYPIQUE

Total N (nitrogen) / Azote (N) total:	26%, of which / dont	7% Nitrate N / Azote Nitrique (NO ₃) 19% Ammoniacal N / Azote Nitrique (NH ₄)
S:	13%	13% water soluble sulphur / <i>soufre soluble dans l'eau</i>
B:	0.30%	water soluble boron / <i>bore soluble dans l'eau</i>

2. SULPHUR BECOMES A MAIN NUTRIENT

The sulphur freely available from air and water and the sulphur present in the soil, is often not sufficient to support plant growth and meet the needs of the plant. Plants need sulphur and nitrogen at approximately the same time to allow for a good utilisation of nitrogen. That makes a good combined fertiliser such as SICO ANS 26% indispensable. The correct ratios make this mixture optimal for many plants and helps to guarantee getting the best out of crops - both in yield and quality. Because the sulphur in **SICO ANS & SICO BOR-ANS is present in the form of ammonium nitrate, the effects are fast and long lasting.**

3. PROPERTIES

SICO ANS & SICO BOR-ANS are both granulated mineral fertilisers for ensuring that all crops are securely supplied with nitrogen sulphur. Nitrogen is present in the form of ammonium and nitrate. Sulphur is present as sulphate. **SICO BOR-ANS additionally contains boron in a water-soluble form.** Boron is thus available immediately. Years of product experience guarantee problem free storage and very good spreading properties with working widths of over 40 m. Similarly to CAN, ANS contains nitrate nitrogen that works quickly and slow-releases ammonium nitrogen. Sulphur is immediately available to the plant in the form of sulphate. To utilise nitrogen optimally, sulphur has to be present in sufficient quantities in every phase of growth. It is therefore ideal that ANS contains both nutrients in the correct ratio. The supply of the plants is herewith guaranteed in all growing stages.

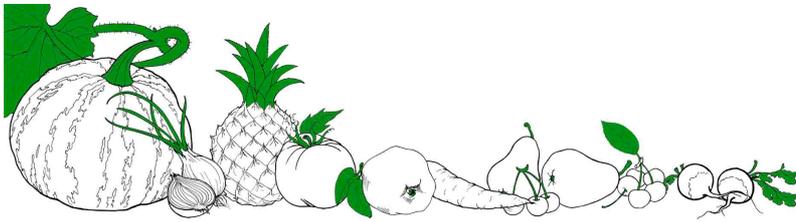
4. ADVANTAGES

- * Immediate and long lasting effects
- * Contains sulphur in the fast working water soluble form
- * **SICO ANS & SICO BOR-ANS** are high quality granulated mineral fertilisers
- * Storage and spreading properties are excellent
- * Reduction in residual nitrogen volume after harvest
- * Targeted supply of sulphur for optimal crop yield of high quality
- * Nitrogen is present in the tried-and-tested combination as nitrate and ammonium.
- * One N-dose provides sufficient sulphur until harvest time

SICO ANS & SICO BOR-ANS are single nitrogen fertilisers which acidify the soil. This can be caused by two mechanisms:

- 1) Uptake of ammonium nitrogen by roots inducing release of H⁺ by the roots. This leads to acidification around the roots.
 - 2) Reaction of ammonium nitrogen to Nitrate nitrogen induced by bacteria.
- Under cold weather conditions mechanism two hardly occurs. It is known from literature that, until the soil temperature reaches a temperature of 12 dgr. Celsius, grasses and cereals can take up easier ammonium nitrogen than nitrate nitrogen. This will result in local acidification around the roots. At lower pH, phosphate solubility increases, improving the plant nutrition with phosphates. Last but not least ammoniumnitrogen is less susceptible for leaching than nitrate nitrogen.

With the reaction 2, transforming of ammonium nitrogen into nitrate nitrogen, which is induced by bacteria, the soil will also become more acid, increasing solubility of phosphates in the soil. The sulphur in the product will cover deficiencies or shortages of sulphur stocks in the soil. As sulphate is susceptible for leaching, these deficiencies will foremost been seen in spring and this will affect yields in a negative way.



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5. APPLICATION

SICO ANS & SICO BOR-ANS should be applied in the first, but at the latest in the second application of nitrogen fertiliser. Thus, optimally adjusted quantities of sulphur are spread that, together with nitrogen, in one fell swoop supply the crop with sufficient sulphur until harvest time.

Examples of applications are: Spring application rates:

- Wheat: 200 kg/ha
- Grassland: 400 kg/ha
- Cabbage: 300-500 kg/ha