



Ruminants



Poultry

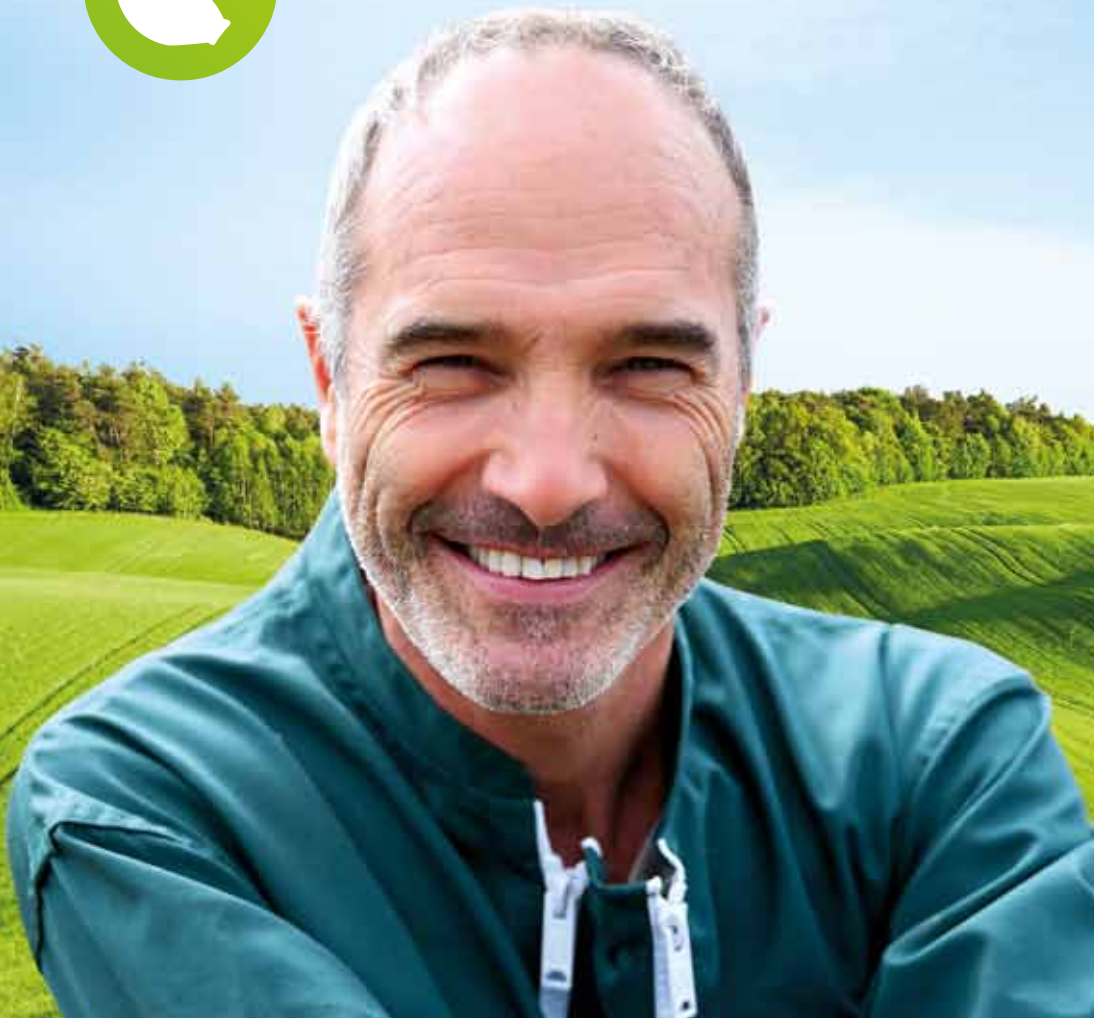


Swine



**SOLVAY**

asking more from chemistry®



**bicar<sup>®</sup>z**

the solution for improving  
the growth and the well-being of your livestock



## A high quality sodium bicarbonate supplement for animal nutrition

Breeders must continuously adapt their animals' diet according to changing economic, climatic and biological conditions. A carefully balanced diet is therefore essential to obtain good performances and assure the well-being of ruminants, poultry and swine.

BICAR<sup>®</sup>Z\* is widely used in animal nutrition as it is an important chlorine-free and sulfur-free source of sodium. By acting positively on the electrolyte balance, BICAR<sup>®</sup>Z offers several benefits:

- optimizes the feeding regime,
- reduces heat stress disorders,
- meets the individual animal's and livestock's biological needs,
- improves feed efficiency.

BICAR<sup>®</sup>Z, a quality grade of sodium bicarbonate, is produced according to SOLVAY's process to obtain animal feed. This process based on salt and limestone, guarantees a purity that equals the sodium bicarbonate naturally occurring in the soil, the saliva and blood of all humans and animals.

### Sodium bicarbonate is classified as raw material in animal nutrition

BICAR<sup>®</sup>Z is the only sodium salt that optimizes electrolyte balance of the ration without risking environmental damage for effluents.

The use of sulfate-free sodium reduces water pollution caused by sulphur and sulphur hydrogen formation. In case of livestock wastewater, biogas treatments will be less coercive, thus assuring a more cost-effective solution and better performing biogas system digester.

### BICAR<sup>®</sup>Z is recommended in animal nutrition and a guarantee of:

- **Purity:** our ISO 9001 (2008) quality system, with integrated GMP, QS and HACCP certification guarantees permanent BICAR<sup>®</sup>Z purity.
- **Traceability:** BICAR<sup>®</sup>Z is marked with a batch number enabling the product to be tracked throughout the entire production process from the point of origin to storage and distribution.
- **Reliability:** the worldwide network of plants and Solvay's commitment for developing BICAR<sup>®</sup>Z guarantee long-term availability of a quality product.
- **Distribution:** is distributed by Solvay directly or by its distribution partners in the animal feed sector.

\* Z stands for Zoo technology





# For Ruminants

## The best buffer and source of sodium

Regularly supplemented in ruminant diets and in case of heat stress, BICAR®Z helps controlling disorders of the body:

- it provides two important elements, **bicarbonate** and **sodium**,
- it corrects the Dietary Cation-Anion Balance ( $DCAB = Na + K - Cl - S$ ) and **optimizes feed efficiency**,
- it helps to **reduce ruminal and metabolic acidosis** by correcting the alkaline level in the blood. It also contributes to preventing complications related to ruminal acidosis: laminitis, drop in milk production, increase in mastitis...,
- it helps to **avoid weight loss** in early lactation,
- it is essential in case of heat stress to **keep ruminal acidosis under control** and to re-build sodium stores.



# For Poultry

## The best source of sodium to improve performances

According to the type of diet, BICAR®Z has several benefits:

### Chicken and turkeys:

- increases body weight, diet conversion and feed intake,
- reduces water intake by 5%, thereby improving litter conditions,
- maintains a correct electrolyte balance range ( $EB = Na + K - Cl$ ) by providing chlorine-free sodium,
- reduces disorders caused by ascites,
- improves performance of chicken under heat-stress conditions.

### Layers:

- significantly enhances egg quality: eggshell thickness, egg quantity and specific weight.



# For Swine

## Improving the growth

BICAR®Z optimizes the electrolyte balance and so zoo-technic performances.

BICAR®Z maintains a correct electrolyte balance range by providing chlorine-free sodium ( $EB = Na + K - Cl$ ).



- **Piglets:** increases the average daily gain and the body weight after weaning
- **Pigs:** improves the feed intake and the growth
- **Sows:** optimizes the lactation, the survival of the piglets and the recovery of the sows at the end of lactation.

BICAR®Z optimizes the feed intake and the growth of swine. Moreover it helps to maintain pH in digestive system.

- Improves preventive action of organic acids while maintaining a good pH
- Helps to prevent gastric ulcers
- Stimulate the reduction of hoof diseases

Finally, BICAR®Z improves meat quality (tenderness and juice) without modifying the color and the taste.

### Bicar®Z dosage recommendations

					
Milk cows	Young fattening bovine	Dairy goats, dairy ewes	Fattening lambs	Poultry	Swine
250g daily per cow till 300g daily per cow during heat stress	150g daily continuously	20g daily continuously	1% of feed taken in	0.5% up to 1% of the feed taken in continuously	0.5% up to 1% of the feed taken in continuously



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Solvay Soda Ash and Derivatives (SA&D) is a world leader in its sector, producing soda ash serving the glass, detergent and chemical markets and developing solutions based on sodium bicarbonate and trona serving the healthcare, food, animal feed, and flue gas cleaning markets. SA&D has 11 industrial sites worldwide, more than 3,700 employees and serves 90 countries.

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