



deutscheback
better baking



Baking concepts

Individual and specific –
for greater efficiency and profitability





The Technology Centre of the Stern-Wywiol Gruppe in Ahrensburg

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DeutscheBack

Your competent partner for baking concepts and enzyme systems

Individually developed enzyme systems are becoming increasingly important for the efficient and cost-effective production of baked goods. The specific requirements of this market demand a high level of specialist knowledge and worldwide practical experience. DeutscheBack is at home in the international markets and responds individually to growing country-specific needs. The focus is on solutions tailor-made to suit each customer.

DeutscheBack is a member of the independent, owner-managed Stern-Wywiol Gruppe. The group of companies, made up of eleven specialized ingredient firms in Germany and 16 affiliates abroad, operates around the globe. The heart of the enterprise is the Technology Centre in Ahrensburg, near Hamburg, where 70 experts collaborate on an interdisciplinary basis in 15 applications laboratories.

Through the close links with its sister companies Mühlenchemie and SternEnzym, both of them specialists in the relevant industries, DeutscheBack has a wide theoretical and practical knowledge of baking. The resulting synergisms and interdisciplinary product development form the basis of the Group's unique capabilities and strength in the field of innovative baking concepts.

The Experts from the Stern-Wywiol Gruppe: from Single Ingredients to Functional Systems.





Baking concepts

Innovative products and familiar, trusted enzyme systems: DeutscheBack offers both.

Our experts develop individual functional systems with precisely adjusted ingredients and usage levels. Our motto is "as much as necessary, as little as possible", and in exact response to the task.

The baking concepts TopBake and TopSweet will introduce you to a selection from our product range – developed to achieve top-class results in numerous applications.

Advantages of baking concentrates – usage level 0.5–5 %

- Use of standard flours, seeds and many other raw materials
- Optimized storage and logistics costs
- Flexible use of recipes and flavourings
- Functional active ingredients to complement recipes

Advantages of baking premixes – usage level 10–50 %

- Use of standard flours
- Simple, reliable handling
- Time saving in development and production
- More variety in the range

Advantages of complete mixes – usage level 100 %

- Maximum product safety in the production process
- Standardized production
- Optimum quality
- Trend products as a new incentive to buy

TopBake bread specialities

German bread, with its diversity of specialities, is famous throughout the world. DeutscheBack offers a number of solutions for quality products made from wheat, rye and spelt, including the use of wholemeal flours. Our presence in many markets around the globe has led us to develop excellent baking concepts, for example for baguettes, tortillas and steamed buns.

Bread

Application	Product	Properties	Usage Level
Sandwich and toast bread	TopBake Bread Improver	Woolly-soft crumb with good elasticity and a fine texture	0.5-5 %
Rye bread	TopBake Bread Pure	Economical basic concentrate for optimizing dough properties	0.5- 5 %
Mixed wheat and rye bread	TopBake Brown Bread	Premium concentrate for easy handling and good volume	0.5-5 %
Bread with a high sugar content	TopBake Sugar Bread	Basic concentrate for good handling and uniform quality	0.5-5 %
Wholemeal bread	TopBake Bran Bread	Very good fermentation tolerance for doughs with a high dietary fibre content	0.5-5 %
Spelt bread	TopBake Wholemeal Spelt Mix	Efficient and simple production of a speciality	10-50 %
Rustic wheat products	TopBake Rustic 2 %	Economical basic concentrate for complex dough processes *	0.5-5 %
Protein bread	TopBake Protein Plus 50 %	Tasty spelt bread with a good 18 % protein and 25 % carbohydrate	10-50 %

* Retarded fermentation or freezing



Rolls and other small items

Application	Product	Properties	Usage Level
Hamburger buns	TopBake Bun Improver 1	Very good volume, fine texture, woolly-soft crumb	0.5–5 %
Hot dog buns	TopBake Bun Improver 2	All-rounder for optimal crumb properties in soft products	0.5–5 %
Wheat rolls	TopBake Cold Gold	Premium concentrate for complex dough processes*	0.5–5 %
	TopBake SBM	All-rounder for direct dough processes	0.5–5 %
	TopBake Rolls Pure	Enzyme system with ascorbic acid but no other additives	0.5–5 %
	TopBake Rustic 2 %	With colouring and flavouring malts for an attractive rustic note; also suitable for freezing	0.5–5 %
Rye rolls	TopBake Easy Rye	High dough stability even with over-fermented mixed wheat and rye doughs	10–50 %
Yoghurt rolls	TopBake Yoghurt Spelt 50 %	Succulent yoghurt/spelt rolls in mixtures with spelt flour type 630	10–50 %
	TopBake Yoghurt Malt Multigrain 50 %	Grains lend bite; yoghurt powder ensures a fresh taste when combined with wheat flour	10–50 %
Protein rolls	TopBake Protein Wheat Rolls 50 %	Tasty protein/wheat rolls with approx. 20 % protein and a good 30 % carbohydrate	10–50 %

* Retarded fermentation or freezing



International specialities

Baguettes

Application	Product	Properties	Usage Level
Traditional	TopBake Baguette TKS Basic	Basic concentrate for optimal stability with long dough processes	0.5–5 %
	TopBake Baguette TKS	All-rounder for reliable production of typical French baguettes	0.5–5 %
Wholemeal, rye, malt etc.	TopBake Gold Baguette Dark	For complex applications with wholemeal or rye flours etc. *	0.5–5 %

* Retarded fermentation or freezing

Ciabatta

Application	Product	Properties	Usage Level
Ciabatta	TopBake Ciabatta 2 %	Good gas retention for typical texture with long dough processes	0.5–5 %

Flat bread

Application	Product	Properties	Usage Level
Pizza	TopBake Pizza Improver	Shape and dough stability for American-style pizzas; contains emulsifiers	0.5–5 %
	TopBake Pizza Gourmet	Shape and dough stability for traditional Italian pizzas	0.5–5 %
Tortillas	TopBake Tortilla E	Enzyme system for freshness and elasticity	0.5–5 %
	TopBake Tortilla S	Better water binding for a longer shelf-life, elasticity and rolling properties	0.5–5 %
Flat bread (Turkish)	TopBake Relax Flat Bread 1 %	Good shaping properties, gas retention and dough stability	0.5–5 %

Steamed bread/fried products

Application	Product	Properties	Usage Level
Steamed bread / steamed noodles	TopBake Steamed Buns	Good volume; very fine, bright crumb	0.5–5 %
Beignet	TopSweet Beignet	Easy handling for uniform quality	0.5–5 %
Mandazis	TopSweet Mandazi	Easy handling for uniform quality	0.5–5 %

Frozen dough pieces

Special processes need special products. That includes freezing of dough pieces that are to be stored for three to six months before being baked off as fresh bread. The TopBake Frozen product

series is specially designed for long-term freezing and stabilizing of dough pieces in order to meet the requirement of uniform quality.

Application	Product	Properties	Usage Level
Rolls	TopBake Frozen Roll	Enzyme system with ascorbic acid for clean-label recipes	0.5–5 %
Baguettes	TopBake Frozen Baguette	Enzyme system with ascorbic acid for clean-label recipes	0.5–5 %
Croissants	TopSweet Frozen Croissant	Enzyme system with ascorbic acid for clean-label recipes	0.5–5 %



Enzyme systems and enzyme compounds

Cost-effective and ecologically sound

The huge number of enzymes and the diversity of their applications in baking are impressive. Moreover, the high efficacy of enzymes, and thus their low dosage levels, make their production and use attractive from the point of view of both cost and ecology. Enzymes already save resources in the fields of production and logistics, since they need less warehouse capacity and packaging material. And most important: enzymes can reduce the amount of other baking ingredients added.

With this in mind, our technologists have developed innovative baking concepts that offer added value in terms of economy and quality as well as providing the basic treatment for specific applications. From hundreds of single enzymes we formulate enzyme systems that have greater potential effect because of their combination. For example, they can help to achieve a longer shelf-life or reduce the amount of salt added.

When designing our enzyme compounds we make use of the synergisms between enzymes and other raw materials such as dietary fibres or hydrocolloids in order to optimize water absorption or reduce the addition of gluten.



Enzyme systems

Prolonged shelf-life

Consumers rate texture with a practical test: by feeling and squeezing the product. That means freshness of the crumb and elasticity are not only important criteria for the decision to buy wrapped bread; they also determine when consumers throw

away bread bought fresh because it has "gone stale". The enzyme systems adjusted to different flour mixtures result in a much fresher and succulent crumb and therefore a more attractive product.

Product	Properties	Usage Level
TopBake Fresh series	Keeps the crumb of wrapped wheat bread soft and elastic during storage	0.5–2 %
TopBake Fresh XL2 1 %	Prolongs the shelf-life of the crumb, especially with rye or mixed wheat-and-rye bread and heavy doughs like "Stollen" (sweet fruit loaves)	0.5–2 %
TopBake Fresh XL3 1 %	Soft, succulent crumb in wheat or mixed wheat bread	0.5–2 %
TopBake RMB Fresh 2	Good water binding; soft, succulent crumb, especially with mixed rye bread	0.5–2 %



Better volume and stability

The potential of wheat flour lipids was underestimated for a long time, yet the polar lipids – especially glycolipids and phospholipids (lecithins) – have an effect on the baking process.

Mulgazym optimizes their emulsifying properties, thus making it possible to reduce the addition of other emulsifiers or avoid it completely.

Product	Properties	Usage Level
Mulgazym SFX series	Increases the baked volume of hamburger buns, sandwich loaves etc. and keeps the crumb fresh	0.1–2 %
Mulgazym DFX series	Improves gas retention and fermentation tolerance; increases baked volume; creates a finer texture in wheat products	0.1–2 %
Mulgazym EFX series	Improves dough stability, fermentation tolerance and baked volume; creates a finer texture	0.1–2 %

Salt reduction

A healthy diet without loss of quality

There is plenty of evidence that excessive salt consumption is detrimental to health. Since a large proportion of the salt consumed daily is taken in through bakery products, many countries have set

limits to its use. Besides loss of flavour, a reduction of the salt content has an adverse effect on stickiness, dough stability and gas retention. Saltase can compensate for these disadvantages.

Product	Properties	Usage Level
Saltase	Compensates for the functionality of salt	0.1–2 %
Saltase Plus	Compensates for the loss of functionality and flavour caused by salt reduction	0.1–2 %

Enzyme compounds

Optimized water absorption

In industrial baking, good water binding has a direct influence on processing properties and the quality of the products. So the stability and consistency of the dough during its preparation are just as important in terms of quality as the volume, freshness and elasticity of the end products.

The product line TopBake WA optimizes water absorption and enhances the stability of the dough. Moreover, the TopBake WA Pure series is available as a variant without E numbers.

Product	Properties	Usage Level
TopBake WA series	Increases water absorption capacity, optimizes dough stability and enhances the succulence of the crumb	0.5–5 %
TopBake WA Pure series	Variant without E numbers	0.5–5 %

Gluten reduction

An all-rounder for weak and composite flours

The use of weak flours or gluten-free raw materials like maize, soy or cassava (tapioca) has a marked influence on baking performance. The weaker the wheat gluten, or the smaller the proportion in the product, the greater is the negative effect on dough

stability and volume. This loss of quality can be compensated for with TopBake Gluten Enhancer; in recipes containing vital wheat gluten it is possible to replace ten parts of vital gluten with one part of Gluten Enhancer.

Product	Properties	Usage Level
TopBake Gluten Enhancer series	Optimized dough stability; good volume; enhanced crumb structure	0.5–5 %



TopSweet pastry goods

The availability of raw materials such as fresh eggs, dairy products and emulsifiers is just as country-specific as climatic conditions and hygiene. The overall situation determines the concentration of the baking concepts used. With TopSweet, DeutscheBack

offers individual baking concentrates, baking pre-mixes and complete mixes to meet the requirements of very different countries.

Yeast-raised pastry goods

Application	Product	Properties	Usage Level
Small yeast-raised items, plaited buns, flan bases	TopSweet Yeast Quark Dough 20 %	Very good shelf-life, fluffy crumb; contains quark powder	10–50 %
“Stollen”; heavy sweet yeast doughs	TopSweet Stollen	Good volume with heavy yeast doughs	0.5–5 %
Panettone, heavy yeast doughs	TopSweet Panettone	Improves dough stability, volume und shelf-life of the crumb	0.5–5 %
Quark dough with baking powder	TopSweet Quark Dough 50E	Good machinability with baking powder and quark powder	10–50 %
Deep-fried products	TopSweet Doughnut 10 %	Excellent dough stability – also with retarded fermentation or freezing; large volume, even texture, bland taste to enable flexible flavouring	10–50 %
	TopSweet Doughnut 3 %	Basic mix for good volume, soft crumb and long shelf-life	0.5–5 %
Croissants	TopSweet Croissant direct	Easy, reliable handling even with freezer-to-oven use	0.5–5 %
Croissants, frozen	TopSweet Croissant	All-rounder for retarded fermentation or freezing	0.5–5 %





Doughs and batters

Application	Product	Properties	Usage Level
Madeira cake	TopSweet Madeira Cake 20 %	Uniform results, succulent crumb, good shelf-life	10–50 %
Plain or fruit cake, muffins	TopSweet Muffin Soft 30 %	Very soft crumb, good shelf-life, pleasant flavour, includes egg powder	10–50 %
	TopSweet Muffin Mix 10 %	Basic mix	10–50 %
Sponges, flans	TopSweet Sponge	Very good whipping properties; fluffy, succulent crumb	10–50 %
Sponges, Madeira cake	TopSweet Sponge FM AS	Fluffy, succulent crumb, good whipping properties, includes egg powder	10–50 %
Plain or fruit cake, chocolate muffins	TopSweet Brownie 50	Strong chocolate taste, dark colour, extremely succulent with a long shelf-life	10–50 %
Choux paste	TopSweet Choux Paste Mix 100 %	Integrated compound for choux pastries, éclairs, crullers, or as a 40 % mix for quark balls	100 %
Quark balls	TopSweet Quark Ball Mix	Easy handling, uniform shape, fresh and succulent	100 %
Pancakes	TopSweet PanCake EL 5 %	Easy handling for reliable success	0.5–5 %

Prolonged shelf-life

Application	Product	Properties	Usage Level
Madeira and plain or fruit cake	TopSweet Fresh Cake TopSweet Fresh Cake Plus V	Enzyme system for recipes with a large proportion of fat and sugar; prolongs the shelf-life	0.5–5 %
Heavy doughs/”Stollen”	TopFresh Stollen	Enzyme compound with emulsifier for a longer shelf-life	0.5–5 %



Fillings and toppings

Application	Product	Properties	Usage Level
Apple fruit mix	Apple Fruit Mix 50	Integrated compound for tasty apple fillings with pieces	100 %
	Apple Premix	Stabilising system for use with frozen or fresh apple pieces	10–50 %
Quark filling	TopSweet Quark Filling	Baking and freeze-thaw resistant; natural, mild taste; contains quark powder	10–50 %
Cheesecake	TopSweet Cheesecake Mix S	Sliceable and freeze-thaw resistant; aromatic flavour	10–50 %
	TopSweet Cheesecake Mix HVOF	Very succulent; contains no colourants or hardened fats	10–50 %
Egg custard	TopSweet Egg custard Premix	Whippable, for use with fresh egg	10–50 %
	TopSweet Egg custard 100 %	Integrated compound, including egg powder; whippable	100 %
Flan glaze, colourless	TopSweet Flan Glaze Neutral	Capable of re-heating; freeze-thaw resistant	0.5–5 %
Juice binder	TopSweet Juice Binder	To be used cold	10–50 %
Florentines, toppings	TopSweet Florentine Mix S	Easy handling; low trans fatty acid content	10–50 %

Creams and fresh cream stabilisers

Application	Product	Properties	Usage Level
Cooked cream	TopSweet Cooked Cream	For use with milk and sugar	10–50 %
Cold cream	TopSweet Cold Cream Powder	For use with water and sugar	10–50 %
	TopSweet Whip Fix Volume	For use with milk; whippable, freeze–thaw resistant	10–50 %
Fresh cream stabiliser, neutral	TopSweet Neutral Cream Stabiliser	Bland taste for the creative use of fruits and flavourings	10–50 %
Fresh cream stabiliser, gelatine-free	TopSweet Cream Natural GF	Reliable and universal use for stabilising dairy and vegetable cream	10–50 %



Gluten-free bakery products

TopBake Rice and TopSweet Rice are based on rice products, hydrocolloids and enzymes; from integrated compounds to “on top” treatments they are tailor-made baking concepts for all manner of

different products. The product line is ideal for the production of gluten-free baked goods and consists entirely of raw materials guaranteed to contain less than 20 ppm gluten.

Application	Product	Properties	Usage Level
Bread	TopBake Rice Bread	With roasted seeds for rice bread with a typical bread taste	100 %
	TopBake Rice Bread AF	Allergen-free rice bread	100 %
	TopBake Rice Bread Premix 50	Premix for mixing with gluten-free flours	10–50 %
	TopBake Rice Bread AF Premix 50	Allergen-free premix for mixing with gluten-free flours	10–50 %
Prolonged shelf-life	TopBake Fresh 100 (Rice)	Enzyme system for a long-lasting soft and succulent crumb	0.2–0.5 %
Plain or fruit cake	TopSweet Cake Mix Rice	Madeira cake, muffins, light wafers and short-pastry biscuits	100 %
Sponges	TopSweet Sponge Cake Rice	Light, fluffy sponge bases	100 %





Baking concepts

Individual and specific – for greater efficiency and profitability

Has our selection of products stirred your curiosity? If so, we would be glad if you would contact us. Our bakers and applications technologists will be pleased to advise you on how to use the products in your company.



The production facility of the Stern-Wywiol-Gruppe in Wittenburg

Production

We offer our customers individual solutions – of the highest possible quality. Regular audits, both internal and by renowned outside institutions, ensure that only top-class products leave our plant and meet all the customer's quality criteria.

Modern production plant

We know what really matters in the production of flour ingredients. That is why we developed our compounding plant ourselves. It has five separate blending lines, which makes it possible to produce different compounds of active ingredients without cross-contamination.

Both powdered and liquid substances are measured accurately to the gram and processed to make up over 35,000 tonnes of compounds a year. Our production plant is operated automatically by a modern process control and visual display system. That enables us to carry out all orders correctly, whatever their size.

Quality assurance measures such as automatic control sifting and metal detection guarantee conformity with the HACCP standard. And the easy-to-clean design of the plant makes a further contribution to safety.

Quality from the raw material to the finished product

Before the purchased raw materials are released for production they are subjected to strict controls. In-house and outside laboratories perform thorough tests to ensure that all the raw materials meet the demanding quality requirements. Our finished goods are tested just as carefully, too. The quality system is complemented by an unbroken line of documentation and regular audits. Our certifications are proof that our quality management conforms to the highest standards.



Certifications/standards

- FSSC 22000 (Food Safety System Certification)
- GMP certification according to Part II of the EU GMP Guide
- HACCP system
- Allergen management
- Kosher and halal management
- "Bio" seal for organic products

Quality assurance measures

- Automatic standard control sifting from 0.5 to 5 mm, depending on product attributes
- Metal detection
- Easy-to-clean plant design for maximum quality and flexibility
- Unbroken chain of documentation
- Reliable traceability of batches of raw materials and packaging
- Regular conduct of employee training





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