



Novozymes Acrylaway®

Less acrylamide, same great-tasting products

To comply with increasing regulation and protect their brands, many food manufacturers are looking to reduce the acrylamide levels in their products. Consumers are increasingly concerned with health issues, and the EU now requires food manufacturers to ensure acrylamide levels are below benchmark levels.

Acrylamide is primarily formed as a by-product of the Maillard reaction between asparagine and reducing sugars. This typically occurs at temperatures over 120°C and is responsible for the delicious flavor and color in toasted, fried or baked starchy products. Acrylamide is an undesired by-product that the European Food Safety Authority and others evaluate as a possible carcinogen.

Novozymes' asparaginase, Acrylaway® converts asparagine into aspartic acid. This means less asparagine is available to form acrylamide. The other amino acids and sugars in the food remain active to contribute to the Maillard reaction.

Acrylaway® is an effective, easy-to-implement solution that reduces acrylamide levels up to 90% without affecting the taste, texture or appearance of the final products.

Benefits

Up to 90% reduction

Trials carried out at Novozymes' laboratories, external institutes and on industrial scale have documented a reduction of up to 90% in the final products, depending on the product category, application and process.

Easy to implement

Acrylaway® is a processing aid that can be easily added to most production processes at many temperatures and pH levels. The application can be optimized to suit specific processes by adjusting parameters such as dosage and holding time.

Expert support

To ensure a profitable and efficient process, our committed Technical Service team is available to offer support and expert recommendations. Their goal is to implement a solution that's right for your process.

Food product	Acrylamide reduction
Cookies and biscuits	50-90%
Crackers	75-85%
Crisp bread and toasted bread	50-90%
Dough based snacks	Up to 95%
Pelleted snacks	Up to 95%
Coffee	Over 60%
French fries	Up to 50%

Table 1. Tests using Novozymes Acrylaway® at independent institutes and in Novozymes' laboratories have indicated significant reductions in acrylamide levels.

Innovating to meet your needs

Acrylaway® is sold as liquid (Acrylaway® L) as well as granulate (Acrylaway® BG) with a strength of 3500 ASNU/g. Further information is available on request.

Learn more about Acrylaway® at novozymes.com/acrylaway

Get ahead

Staying ahead of the dynamic food and beverage market requires the best technology and expertise to become even more flexible, efficient and profitable. With our solutions and know-how, Novozymes can support you on that journey. Let's transform the quality and sustainability of your business together.

It's the quality that counts

Novozymes provides safe production strains, assessed and approved raw materials – under strict, controlled processes that have full traceability. We are your expert when it comes to monitoring, understanding and complying with local and global food legislation, and we continue to pursue key international food safety and quality certifications. So you and your customers can feel confident.



About Novozymes

Novozymes is the world leader in biological solutions. Together with customers, partners and the global community, we improve industrial performance while preserving the planet's resources and helping build better lives. As the world's largest provider of enzyme and microbial technologies, our bioinnovation enables higher agricultural yields, low-temperature washing, energy-efficient production, renewable fuel and many other benefits that we rely on today and in the future. We call it Rethink Tomorrow.

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