

norevo®

**Confectionery Performers
for sugar-coated sweets**

:always natural

norevo

Global. Sustainable. Innovative.



We are pleased to give you an insight into Norevo's world of confectionery performers with this brochure. Natural raw ingredients, and specialty ingredients derived from them, have been our driving force for more than 120 years.

Norevo at a glance

- » Privately owned and independent
- » 240 employees worldwide from 21 nations
- » 5 production sites on 5 continents
- » In-house laboratory for R&D and product analysis
- » Customers in 79 countries

Natural raw ingredients – innovatively developed

Natural, pure, and sustainably produced raw materials are the basis on which we produce ingredients for our industrial partners.

Whether honey, licorice extract, gum acacia, or other fine raw ingredients – our products meet the high standards of the food, confectionery, and beverage industries. Our international customers from the pharmaceuticals and cosmetics sectors appreciate their long-standing partnership with Norevo.



We act in a spirit of partnership and fairness

It has always been our top priority to cooperate fairly and in partnership with our raw ingredient producers – in many cases, this holds true for generations. With our global presence, we are both locally rooted and internationally connected.

This is the only way to ensure that our raw ingredients are of top quality from their very origin and produced in an environmentally sustainable manner. These strong partnerships provide us – and you – with a stable global supply chain. As a responsible company, we view certifications, sustainable procurement channels, transparent supply chains, and complete compliance all around the world as a key task – and happily and voluntarily go beyond existing standards to this end.

» For us, working with natural products is not a trend – it's part of who we are. «

Johannes Wolff, Managing Director



Each layer counts: From the raw ingredients to the finished sweets

Producing sugar-coated goods is a challenge. It is about precisely coordinating numerous individual production steps and diverse raw ingredients. From the composition of the center to coating to finishing: Norevo supplies products in top quality to be used throughout the entire manufacturing process. We will be happy to advise you regarding your questions and developments.



From the idea to the individual recipe

Our team of experts will be happy to provide you with recommendations on the use of our raw ingredients, to support you in developing individual recipes and optimizing your procedures, and to advise you on the latest process technologies.

There are a number of crucial influencing factors when it comes to preparing the perfect sugar-coated product.

Whether you use a traditional coating pan or a coating drum, which raw ingredients you choose to form the center, and whether you wish to produce hard or soft, sugary or sugar-free coated sweets – all of these factors are crucial when it comes to manufacturing the perfect sugar-coated product.

Pre-coating: pre-treatment for a stable center

Pre-coating or gumming is the preparation of a product's center before the main coating process to achieve ideal coating results.



PRE-TREATMENT OF THE CENTER

PRE-COATING

GUMMING

PRE-PANNING

ISOLATION

STABILIZATION

Objectives of pre-coating

Pre-coating a product's center caters for a perfect end product:

- » Pre-coating facilitates uniform coating results
- » Gumming improves the adhesion between the center and its coating
- » Pre-panning helps smoothen the center surface
- » Isolation helps form a barrier against migration
- » Stabilization increases heat stability
- » Dimensional stability even under mechanical stress

Coatings for a better shine, bite, and shelf life

Our coating, glazing, and sealing agents ensure high product quality and open up new possibilities for functional improvements. They optimize surface properties, enhance adhesion, stabilize sensitive components, and enable innovative confectionery solutions.

Pre-coating

Quick Coat

Quick Coat is a universally applicable gumming agent to pre-treat, standardize, and stabilize sugar-coated and chocolate-coated centers.

- ▶ Smoothens the center surface
- ▶ Allows for homogeneous coating results
- ▶ Improves the adhesion between core and coating layer
- ▶ Forms a barrier against the migration of fat or moisture
- ▶ Increases stability against heat and mechanical stress
- ▶ Suitable for sugary and sugar-free coated sweets



From nuts to jellies – each center has its very own challenges:

- ▶ Nuts: fat migration
- ▶ Uneven centers: rough surface
- ▶ Smooth and hard centers: adhesion
- ▶ Elongated centers: shape
- ▶ Soft fruit: softness and moisture
- ▶ Soft jelly centers: texture and stability
- ▶ Angular centers: edges and corners
- ▶ Acidic centers: migration



Effect coatings

Norevo's effect coatings offer intense salty. Our effect coatings allow for the creation of extraordinary and exciting new coated products.

Quick Sour

Quick Sour is a powdered acidulant designed for panned confectionery. It is a powdered acidulant for panned sweets that allows a strong citric acid layer without affecting the dragee's stability.

- ▶ Intense sour effect, adjustable by dosage
- ▶ Prevents acid migration, spotting, and stickiness
- ▶ Maintains coating stability and visual appeal
- ▶ Easy-to-use powder format for precise application



Quick Flash

Quick Flash is the ideal solution for adding a distinctive salty-liquorice kick to your confectionery – with reliable processing and product protection.

- ▶ Ready-to-use powder blend containing ammonium chloride
- ▶ Creates a bold, salty-liquorice flavour effect, either inside or on the surface of coated products
- ▶ Suitable for various dragee applications in confectionery manufacturing
- ▶ Prevents salt migration, preserving the integrity of sugar layers
- ▶ Ensures high product stability and protects against structural damage during processing and storage



Coating agent

Quick Shell³⁷

Quick Shell³⁷ is Norevo's natural gumming and coating excipient, based on hydrocolloids and sugars.

- ▶▶ Quick weight increase of the shell – 15-20% in abt. 37 minutes
- ▶▶ Considerably shortens the hard coating process
- ▶▶ Smoothens the center surface
- ▶▶ Forms a barrier against the migration of fat, acid, or moisture



Whitening agent

Quick White

Quick White is a whitening agent for coated sweets replacing titanium dioxide.

- ▶▶ Declaration-friendly alternative to titanium dioxide
- ▶▶ Ideal for white and light colored hard sugar-coated sweets
- ▶▶ Stabilizes the center
- ▶▶ Produces stable, smooth, and white surfaces
- ▶▶ Enhances the color intensity
- ▶▶ For production processes with or without cooking

Function of waxes in the glazing process

Soft waxes even out uneven surfaces. Hard waxes lend newly created surfaces their final gloss.



Glazing agents

Quick Glanz

Norevo's glazing agents give hard and soft pan-coated goods a long-lasting perfect gloss even at low dosage levels. They leave a protective film on their surface, thus preventing coated goods from sticking together. Quick Glanz produces a brilliant polish within no time.

Quick Glanz C: Pure sprayed carnauba wax powder

Quick Glanz M: Mixture of micronized beeswax and carnauba wax

Quick Glanz L: Carnauba wax dispersion in highly stable vegetable oil

Quick Glanz B: Beeswax dispersion in stable vegetable oil

Quick Glanz H: Liquid wax-shellac dispersion for direct application

Quick Glanz Liquid: Available on a beeswax or carnauba wax basis, in an aqueous, liquid form

Organic qualities and customized solutions available



Sealing agent

Quick Lac

Quick Lac is a universally applicable sealing agent for sugar-coated and chocolate-coated sweets.

- ▶▶ Alcoholic solution based on select shellac qualities
- ▶▶ Protects the surface gloss and color from environmental conditions such as humidity, fluctuations in temperature, and mechanical stress
- ▶▶ Improves the shelf life of the finished product
- ▶▶ Applicable on bright surfaces
- ▶▶ Available on ethanol and IPA basis (isopropyl alcohol)

Other natural ingredients & flavoring agents

In addition to the special products presented herein, Norevo's range includes other raw ingredients such as gum acacia, licorice extract, and honey. They serve as ideal natural flavoring and coating agents for confectionery.

Gum acacia

Gum acacia thickens, adds volume, and stabilizes the texture. You can create flexible sugar coatings by adding the right amount of gum acacia to your sugar solution. In addition to the ready-made compounds from our Quick range, we also provide this natural raw ingredient as a powder, in pieces, or as granules. Norevo's gum acacia is Kosher and Halal certified and available in organic quality.



Licorice extract

Licorice contains glycyrrhizin, which is about 30 times sweeter than sucrose. Used as a natural sweetening agent, small dosages of licorice extract cater for a natural sweetening effect. In confectionery, it is also used as a flavoring and coating agent. We supply licorice extract as granules, a powder and low-dust powder, a paste, and blocks.

Honey

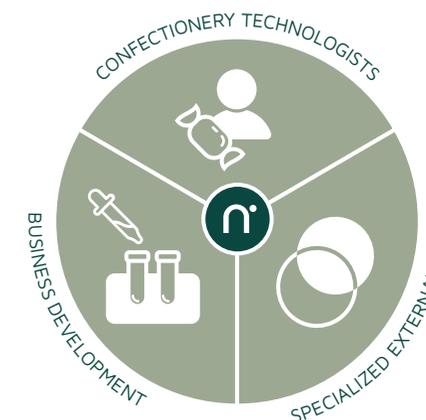
Honey has a high sweetening power; moreover, it lends chocolate-coated goods a subtle flavor. Norevo's offer ranges from raw honey to honey blends to honey powder. We also offer certified organic and Fair Trade honeys.



Individual Solutions. Professional Insight.

Our self-image: We are part of your product development

At Norevo, we develop new and innovative solutions for ever better end products. Alongside our customers, we analyze individual product characteristics and production procedures in order to achieve the best possible results. We offer comprehensive advice on our raw ingredients' range of applications and functionalities. In our training courses and workshops, we impart expert knowledge on specialty ingredients, their processing, and their specific properties in the production process. We apply state-of-the-art analysis methods to ensure that even the most stringent quality requirements are met.



Our top priority: Your perfect product

International trends, emerging industries, and the new opportunities offered by our natural raw ingredients: They are our driving force to continuously research innovations for the food, pharmaceutical, and cosmetics industries. To this end, we closely cooperate with the research and development departments of our customers and use synergies with a wide range of development partners. We put particular emphasis on the cooperation with our partner D&F Sweets GmbH in the field of developing confectionery products.



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Feel free to contact us if you have questions on our products, manufacturing processes, or conditions of sale.

Our team of business development and confectionery technologists is available to you at technical_support@norevo.de.



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