



**Corbion**  
*Keep creating*

# Origin™ Antioxidants

Harnessing nature's freshness solutions



Providing a highly potent, consumer-friendly solutions for:

- ▶ Effective plant-based antioxidant activity
- ▶ Delaying rancidity
- ▶ Color stabilization

## Real, natural ingredients

Your customers know what they want: delicious meats made with familiar, “real” ingredients instead of hard-to-pronounce synthetic ingredients like butylated hydroxyanisole or ethylenediaminetetraacetic acid.

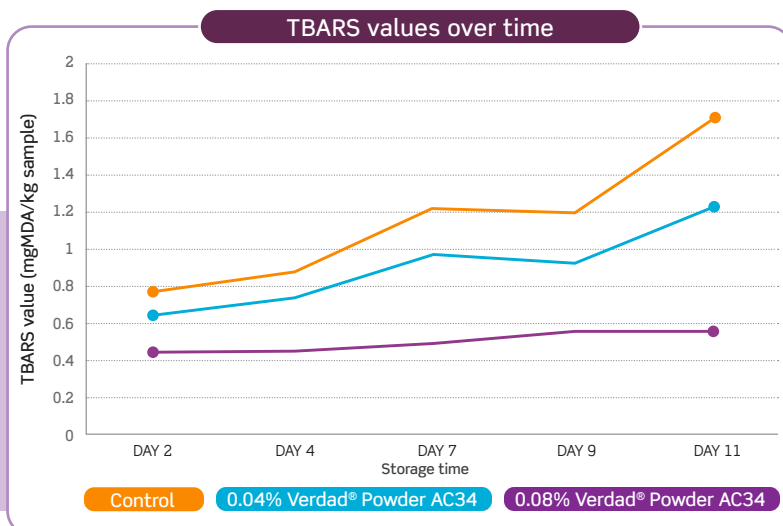
When shopping for those products, consumers often make decisions based on indicators of freshness. In products such as fresh ground beef or poultry, ham or bacon, they look for a bright reddish-pink color. However, they turn away from foods that have oxidized because of their dull color and off-odors.

By slowing the process of oxidation, antioxidant ingredients delay rancidity and color loss so meat products have a longer shelf life. The plant-based, natural antioxidants in Corbion's Origin portfolio offers solutions to effectively deliver this functionality without adding anything to the ingredient label consumers find off-putting.

**Figure 1:** Corbion's **Verdad Powder AC34** extends the shelf life of ground beef by inhibiting lipid oxidation and delaying subsequent development of rancid off-notes and flavors. Here, samples were taken from Verdad Powder AC34 treated or untreated overwrap packaged beef samples stored in a lighted display case at 3°C, analyzed over an 11-day time course for the presence of malondialdehyde, a marker of lipid oxidation.

## Providing highly potent, natural solutions

The unique properties of natural, plant-based antioxidants are widely recognized by meat processors as viable alternatives to traditional preservative ingredients. Kitchen-cupboard ingredients are ideal for manufacturers because they meet the consumers' goal of naturally derived solution while providing oxidation protection. Our Origin antioxidant portfolio offers differentiating qualities — unique value-enhancing processing, certified authenticity and a strong reputation for sustainable sourcing — that combine to deliver advantages for you in a highly competitive industry.



**Figure 2:** Corbion's Verdad Powder AC34 preserves the bright red color of fresh ground beef, protecting it from oxidation and light-induced fading.



Product	Description	Recommended applications
<b>Origin™ RO53</b>	A clean-label liquid antioxidant blend containing rosemary extract, sunflower lecithin and canola oil	Various meat products, food emulsions, oils and fats, as well as low-moisture foods
<b>Origin™ RO50</b>	A clean-label liquid antioxidant blend containing rosemary extract, soy lecithin and canola oil	Various meat products, food emulsions, oils and fats, as well as low-moisture foods
<b>Origin™ Powder RO76</b>	A natural powder product containing water-soluble rosemary extract and sea salt	Fresh, cooked and RTE poultry (turkey & chicken)
<b>Origin™ Powder RO2</b>	A natural powder product based on rosemary powder and sea salt	Various meat products such as fresh ground beef/pork/turkey and chicken, marinated, injected and cured meat and poultry
<b>Origin™ Powder RO4</b>	A natural powder product based on rosemary powder and sea salt	Various meat products such as fresh ground beef/pork/turkey and chicken, marinated, injected and cured meat and poultry
<b>Origin™ Powder RO10</b>	A natural powder product based on: rosemary powder and sea salt	Meat products such as meat sausages (i.e., pepperoni)
<b>Origin™ Powder RO20</b>	A natural powder product based on: rosemary powder and sea salt	Meat products such as meat sausages (i.e., pepperoni)
<b>Verdad® Powder AC34</b>	A powder form of natural concentrated acerola juice and contains magnesium hydroxide as an acidity regulator	Fresh ground beef/pork
<b>Verdad® Avanta® F100</b>	An optimized natural powder product, based on vinegar (white distilled) and natural flavor	Fresh ground beef/pork
<b>Origin™ Powder RB900</b>	A clean-label powder product based on: green tea and sea salt	Fresh ground beef
<b>Origin™ Powder RB500</b>	A clean-label powder product based on: green tea, acerola and sea salt	Fresh ground beef

Interested in Corbion's solutions: Visit [corbion.com/meatandpoultry](https://corbion.com/meatandpoultry)  
Technical support: Visit [corbion.com/contact](https://corbion.com/contact)

Request a free sample: Visit [corbion.com/samples](https://corbion.com/samples)  
Contact Corbion: 800-669-4092

Corbion is the global market leader in lactic acid and its derivatives, and a leading supplier of emulsifiers, functional enzyme blends, minerals, vitamins, and algae ingredients. We use our unique expertise in fermentation and other processes to deliver sustainable solutions for the preservation of food and food production, health, and our planet. For over 100 years, we have been uncompromising in our commitment to safety, quality, innovation and performance. Drawing on our deep application and product knowledge, we work side-by-side with customers to make our cutting-edge technologies work for them. Our solutions help differentiate products in markets such as food, home & personal care, animal nutrition, pharmaceuticals, medical devices, and bioplastics. In 2020, Corbion generated annual sales of € 986.5 million and had a workforce of 2.250 FTE. Corbion is listed on Euronext Amsterdam. For more information: [www.corbion.com](https://www.corbion.com)

© 2022 Corbion. All rights reserved. No part of this publication may be copied, downloaded, reproduced, stored in a retrieval system or transmitted in any form by any means, electronic, mechanical, photocopied, recorded or otherwise, without permission of the publisher. No representation or warranty is made as to the truth of accuracy of any data, information or opinions contained herein or as to their suitability for any purpose, condition or application. None of the data, information or opinions herein may be relied upon for any purpose or reason. Corbion disclaims any liability, damages, losses or other consequences suffered or incurred in connection with the use of the data, information or opinions contained herein. In addition, nothing contained herein shall be construed as a recommendation to use any products in conflict with existing patents covering any material or its use.