


OUR AREAS OF EXPERTISE

# HOW CUSTOM SOLUTIONS HAPPEN



Hallstar offers decades of personal care product expertise and unique formulated solutions. We work collaboratively with companies around the world to create and enhance next generation products.



The billion-dollar beauty and personal care market is evolving rapidly, with new players joining every day. End consumers are highly informed, with evolving, unique needs. They want products that are better, safer and more sustainable. "Great" is now a moving target, and what was selling well yesterday may not sell at all tomorrow.

Hallstar's areas of expertise are aligned with current consumer and market trends, such as improved sun protection, natural ingredients and broader, multifunctional ingredient performance. Our depth of scientific expertise sets us apart, and we are well known for competency in photoprotection science, ester chemistry, functional naturals development and more. We draw from our own extensive research, industry engagement and an agile technical and development team to capture insights directly from consumers—and transform them into unique, formulated solutions.





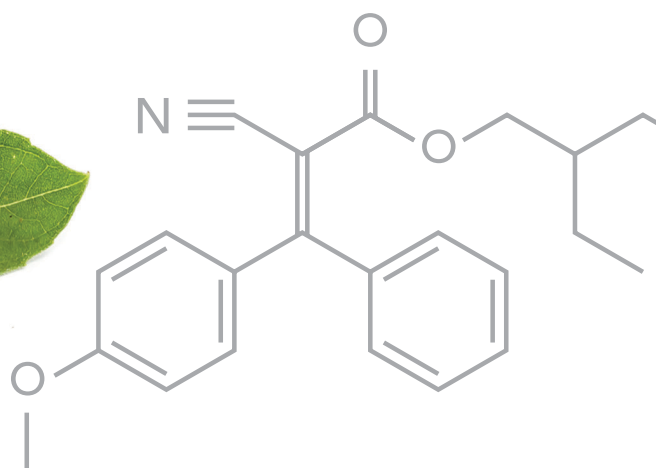
### Unique, On-Trend Formulated Solutions

We are proud to offer custom formulations that support new products or enhance performance of a current line. In addition to hundreds of ready-made formulations, Hallstar's experienced research and development team can work closely with you to develop innovative, custom solutions that meet strict requirements or solve a specific challenge. Our state-of-the-art laboratories around the world have the capability to develop all kinds of cosmetic formulations. We can conduct *in vitro* SPF/PFA testing on-site, and we also provide required technical, regulatory and operational support.

# LET'S WORK WONDERS™

HALLSTAR BEAUTY & PERSONAL CARE PRODUCTS

# OUR EXPERTISE INNOVATION



## Innovative Photostability Science

Hallstar has exceptional experience in developing chemistry solutions to help mitigate the sun's impact on sun, skin and daily wear formulations. Hallstar pioneered photostability science, and today we offer the most powerful and unique UV filter stabilization technology on the market. Unlike UV filters that strongly absorb solar radiation, our effectively non-absorbing ingredients stabilize active ingredients by returning UV filters to their ground states. We offer custom, on-trend formulation solutions, on-site *in vitro* testing, and deep knowledge of the diverse global SPF regulatory environment.



# DRIVES

## Functional Naturals

Hallstar offers a major platform of functional naturals by applying our esterification expertise to pure, botanically derived ingredients from sources such as fruits, nuts and seeds. Our functional naturals can give end products strong and credible claims along with proven, high performance functionality. In fact, the benefits of many of these natural based products are supported through rigorous clinical and panel tests. Our ability to create unique formulated solutions provides an edge in markets that demand products that are both natural and effective.

## Natural Olive Chemistry

Hallstar's Euro<sup>®</sup>, Olivem<sup>®</sup>, Oliwax<sup>®</sup> and Sensolene<sup>®</sup> lines bring together the many benefits of natural olive chemistry and ingredients capitalizing on the olive's long proven benefits with patented, advanced technology. The fatty acid distribution of olive oil is most similar to that of healthy skin sebum. Ingredients based on olive chemistry deliver superior biocompatibility to formulations, translating into enhanced aesthetics and excellent skin feel, hydration and elasticity. Our olive chemistry products are designed and developed exclusively in Italy.

## Extensive Portfolio of Esters

Hallstar has decades of experience with esterification: a chemistry process that is vital to successful beauty and personal care applications. In addition to our wide range of proven ingredients, we offer strong formulation and production capabilities across product lines, which enable us to create solutions to customers' product and technical needs. This ongoing process of invention and innovation continually adds to our base of ester knowledge and our growing database of performance data. Our strong manufacturing capabilities enable flexible production of either large or small custom volume batches.



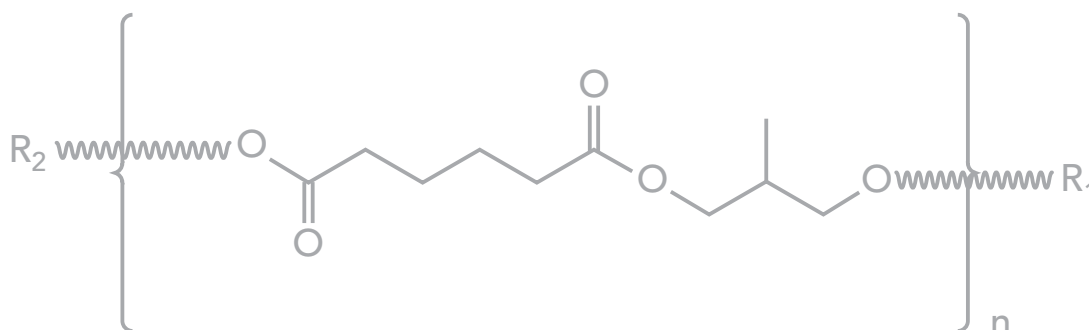
## Global Natural Sourcing

Hallstar is continually investigating promising natural materials that may serve as new product platforms or enhance existing products. We globally source ingredients that meet diverse consumer preferences without sacrificing performance. Sustainable sources of raw materials and the health and safety of local communities are top priorities. In fact, many of our products have earned Ecocert and Fair Trade certifications.

## Innovation

Our highly experienced research and development staff works closely with our sales and marketing teams to develop differentiated ingredients and customized solutions. Drawing from deep scientific and manufacturing expertise, we design new products and develop new application data to meet the trends, consumer preferences and regulatory requirements of specific regions and global markets.

Learn more about Hallstar's areas of expertise and formulated solutions or use our unique online tool to create your own custom formula at [www.hallstar.com](http://www.hallstar.com).

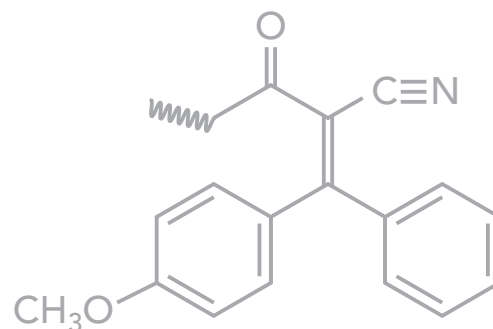


Where n = 3-50;

R<sub>1</sub>, R<sub>2</sub> =



or







HALLSTAR BEAUTY & PERSONAL CARE BRANDS

**OLIVEM<sup>®</sup> | FLORASOLVS<sup>®</sup>**

**HALLBRITE<sup>®</sup> | POLYCRYLENE<sup>®</sup>**

**SOLASTAY<sup>®</sup> | EUROL<sup>®</sup>**

**OLIWAX<sup>®</sup> | SENSOLENE<sup>®</sup>**

**BIOCHEMICA<sup>®</sup> | BIOVERA**

**COSEPT<sup>™</sup> | COSOLV<sup>™</sup>**

**COVERA<sup>™</sup> | HALLGREEN<sup>®</sup>**

**HALLTRESS<sup>®</sup> | LIQUASHEA<sup>™</sup>**

**OP | OPK | RTD**

**SPECTRASOLV<sup>®</sup>**





Corporate and Executive Offices:  
120 South Riverside Plaza, Suite 1620  
Chicago, IL 60606 USA

For customer service and general inquiries:  
1-877-427-4255

International:  
+1-312-385-4494

[www.hallstar.com](http://www.hallstar.com)

**LET'S WORK WONDERS™**