

AMAZING FACTS ABOUT ABS

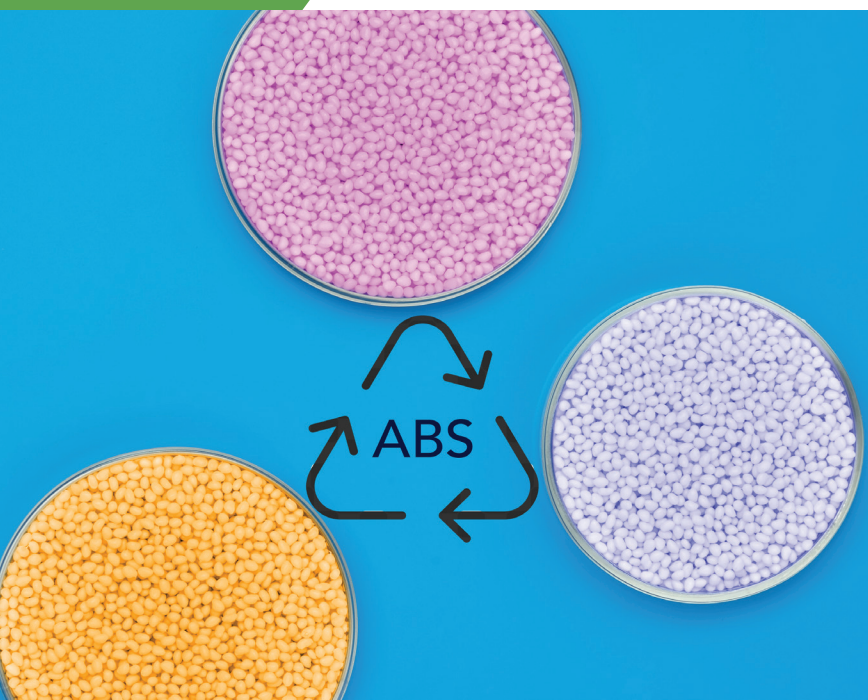
Numerous industries including automotive, healthcare, electronics, and many more, require a high-quality, high-performance material for their products, that also meets sustainability standards and is recyclable.

The answer for many, the incredibly versatile, ABS! To explain just how incredible ABS is, we're sharing some amazing facts from what it is, to where it is, and how it will meet future demands.



1

ABS IS EASILY RECYCLABLE.



ABS stands for acrylonitrile butadiene styrene. It's a styrenics based thermoplastic polymer material. This means, it can be melted and reshaped many times without significant degradation — making it easily recyclable!

2

ABS IS STRONG AND VERSATILE.



ABS is comprised of three components, acrylonitrile makes it robust, butadiene provides a rubber-like toughness, and styrene, provides a high-quality glossy surface. Making it tough, durable and visually appealing all at the same time.

By slightly adapting the formulation to this material, certain properties such as heat resistance, low temperature toughness, impact strength, and resistance to UV radiation can be optimized to meet even the most challenging demands.

3

WE USE ABS THROUGHOUT OUR DAILY LIVES.

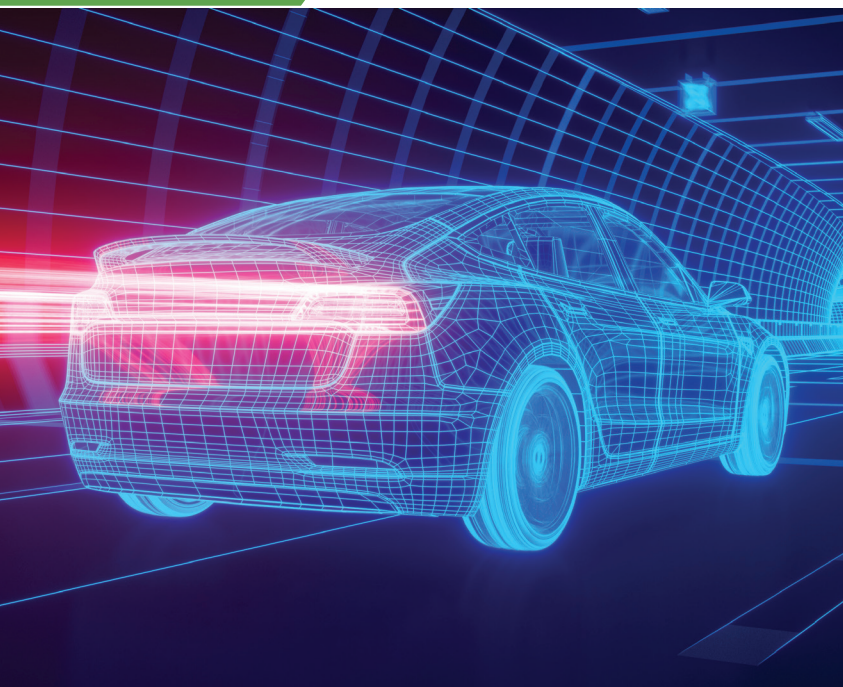


We are all likely to use ABS throughout our daily lives. Have you ever wondered why your shiny chrome showerhead is so light? Because it's not actually chrome, it's plated ABS!

From the casing of your vacuum cleaner to your kitchen appliances. From work to home, laptops, printers, smartphones, TVs, game consoles and yes, even your home entertainment system — all most likely housed in ABS. Even your child's favorite toy bricks, you guess it, made of ABS too!

4

ABS DRIVES ENERGY SAVINGS IN AUTOMOTIVE.



Within the automotive industry, many exterior and interior applications like front grills, rear spoilers, rear-view mirrors, glove box doors, instrument panels, and seat belt pillars are made of ABS. This lightweight and durable material, not only reduces fuel consumption and emissions in cars and trucks, but it also helps vehicles absorb energy during a collision, keeping passengers safe.

Its strength and stability also make it an ideal material for two-wheeler applications like front lamp holders, motorcycle body parts, battery box cases, and many more. Additionally, motorcycle helmets are often made of ABS to protect and ensure the safety of riders.

5

ABS IS HYGIENIC AND WELL SUITED FOR HEALTHCARE APPLICATIONS.



Many ABS products are designed for sensitive applications, such as food contact and medical applications, for example lifesaving ventilators are frequently made of ABS.

ABS is often used for many mobile healthcare applications. Its durable and hygienic properties make it ideally suited for many healthcare casing applications, such as inhaler housing, insulin pens, and more.

6

RECYCLED ABS = HIGH-QUALITY AND NO DOWNCYCLING.



Product producers and consumers alike are looking for high-quality, sustainable materials, and ABS rises to those demands.

Using a state-of-the-art recycling process for ABS, recycled material offers the same product performance as the original material. For example, used electronic parts made of ABS can be shredded, sorted, and reused to make new high-quality products. No downcycling of material occurs.

Material such as INEOS Styrolution ECO Terluran® ABS includes up to 70% recycled ABS. Manufacturers using recycled ABS as a drop-in solution, also have the added benefits of no new processes or investments into new moulding equipment, and no time-consuming testing phases.

7

ABS HELPS TO **AID IN** A CIRCULAR ECONOMY.

Recycling ABS reduces post-consumer waste and keeps valuable material from being landfilled.

Using recycled ABS has a lower greenhouse gas footprint than ABS made from fossil feedstock. Closing the loop with waste prevention, and recycling your ABS, allows for the life cycle of this valuable material to be infinite. To be repurposed and reused, again, and again.

8

THE FUTURE OF ABS **IS COLLABORATIVE.**

Examples of recycling partnerships are increasing, as is the demand for ABS. One such example, INEOS Styrolution and Austrian recycler Bage Plastics announced a collaboration to produce high-quality ABS with up to 70% recycled content in 2019. A prime example of a partnership along the value chain of a circular economy — bringing together manufacturing expertise, and innovative capabilities to produce high-quality recycled ABS.



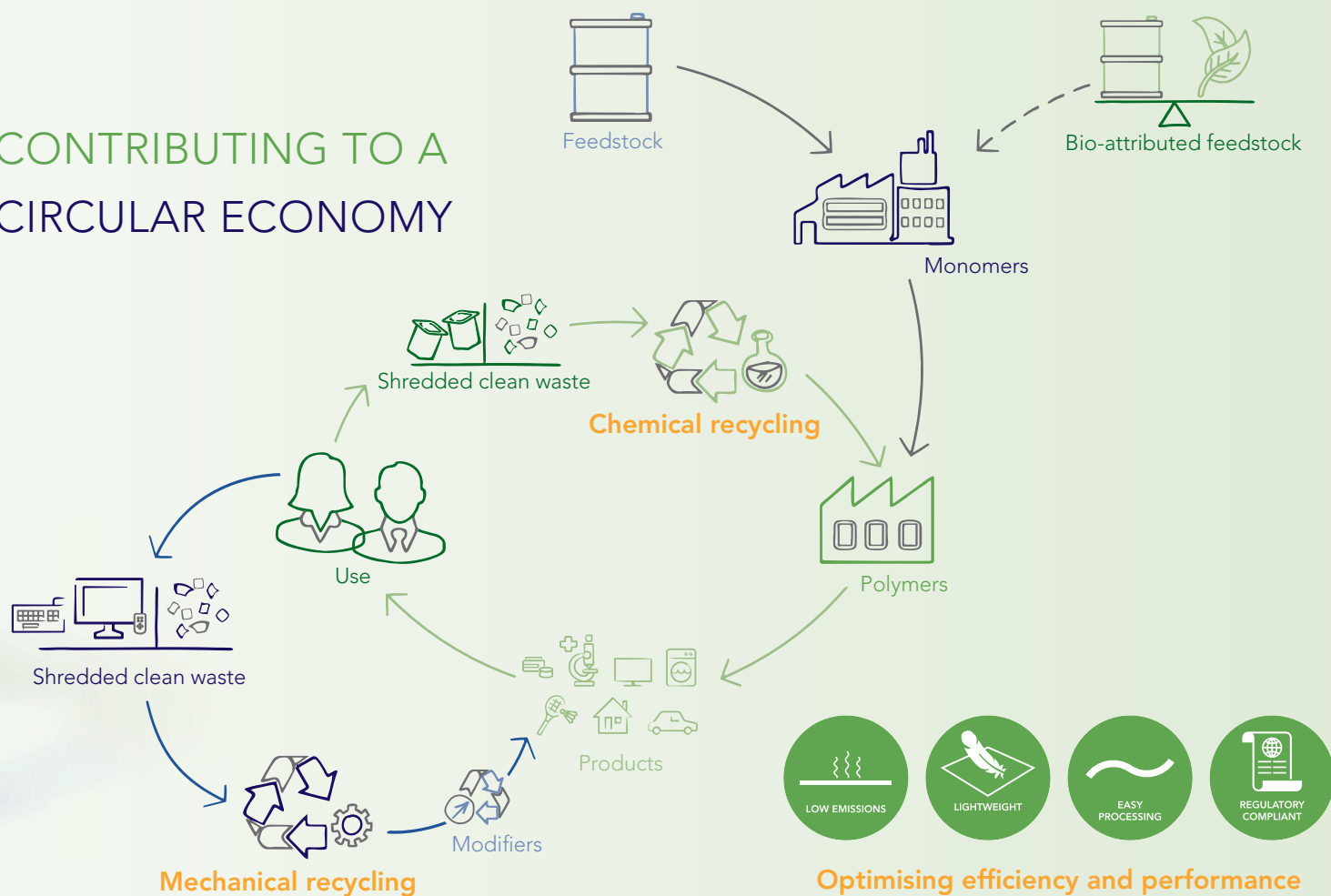
STYRENICS. **MADE FOR RECYCLING.**

Styrenics are one of the most versatile materials in the 21st century, and have revolutionised the way we live today. Our products have become an indispensable part of consumers' everyday lives and provide solutions to societal challenges such as climate change, resource scarcity, urbanisation, rising living standards and population growth.

The solutions styrenics products offer include extending food shelf life thereby reducing food waste, while also providing lightweight solutions for the automotive industry leading to lower fuel consumption.

This new ECO range not only complements INEOS Styrolution's existing strong portfolio of styrenics standard products and specialties, but also matches the performance of our existing portfolio.

CONTRIBUTING TO A CIRCULAR ECONOMY



INEOS
STYROLUTION

ECO

By offering styrenics solutions that deliver strong, sustainable performance, we want to ensure that our customers' businesses and end consumers' choices become more sustainable.

To read more about our ECO family of solutions, please visit:
www.styrolution-eco.com.

To read more about our actions and performance on sustainability visit:
www.ineos-styrolution.com/sustainability

INEOS STYROLUTION AT A GLANCE

INEOS Styrolution is the global leader in styrenics. The company provides products for many everyday applications across a broad range of industries, including healthcare, automotive, electronics, household, construction, toys/sports/leisure, and healthcare.



3,600
EMPLOYEES



10
COUNTRIES

20



PRODUCTION SITES



6 R&D
CENTERS



24 sales
offices

Nº1
GLOBAL
LEADER
in styrenics

90+
YEARS
of experience
in styrenics

founded in
2011

APPROX. **1,000**



PATENTS

4,000+
CUSTOMERS



1,500+ PRODUCTS



2,000+ APPLICATIONS ACROSS SEVEN INDUSTRIES

5 BILLION
EUROS IN REVENUE
IN 2019



AUTOMOTIVE



ELECTRONICS



HOUSEHOLD



CONSTRUCTION



HEALTHCARE



PACKAGING



TOYS, SPORTS
& LEISURE

INEOS STYROLUTION HAS A LEGACY OF SUCCESSFULLY
SERVING THE PACKAGING INDUSTRY FOR OVER 85 YEARS.

LET'S COLLABORATE

If you would like further details, need assistance in creating your applications, or are curious to explore new possibilities with styrenics, please contact us!

www.ineos-styrolution.com/

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