

# A modular technology adaptable to your needs.

Driving coating standards in the automotive and general industrial markets.



Covestro's **Hybrane™**, an innovative family of enriched modular acrylic resins, allows the automotive and general industrial markets to achieve superior coating performances for metal applications. Whether you require higher throughput, reduced energy consumption or better coating durability, **Hybrane™** holds the answer.

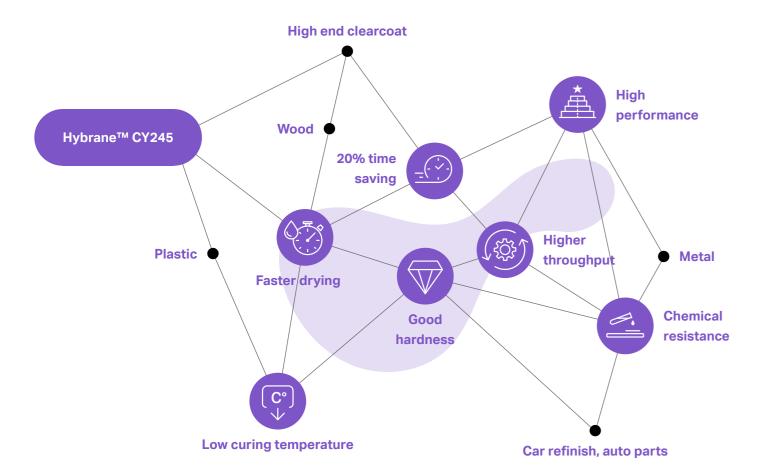
### The right product for the right application

Building on more than 60 years of expertise in this field, Covestro has developed a family of acrylic resins that are opening up new possibilities for the automotive and general industrial markets. Currently, there are two **Hybrane™** products: **Hybrane™ CY245** and **Hybrane™ CY235**. Launched in 2010, **Hybrane™ CY245**, with 4% OH, is used by the premium car refinish clearcoat market.

Following the success of this product, in 2018, Covestro launched **Hybrane™ CY235**. This product is used in general industrial topcoats, as well as for car refinish and automotive part primers. Together, these two products are meeting the demands of both coating manufacturers and end-users around the world, as well as those of all relevant regulatory authorities.

# Reduces energy consumption Offers excellent adhesion to a variety of substrates Key resin benefits Enables superb product performance

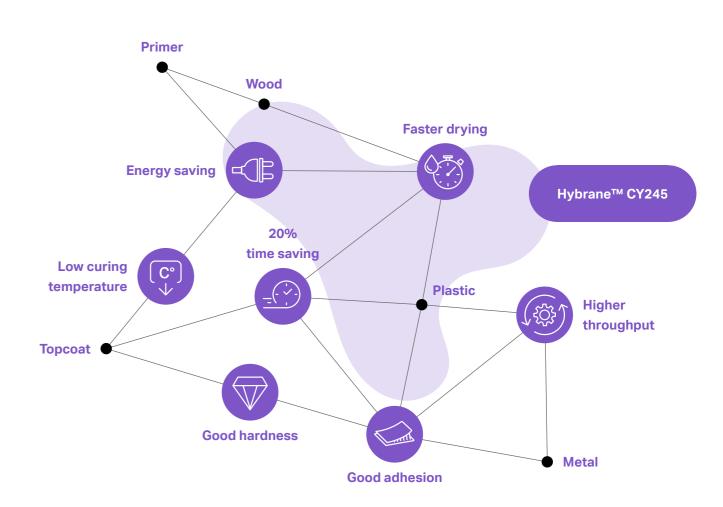
## With **Hybrane™ CY245**, higher throughput is the name of the game



Covestro's **Hybrane™ CY245** is designed for high-end car refinish and auto parts premium clearcoats. Leveraging unique proprietary technology, this innovative product delivers unparalleled performance, thanks to its lower curing temperature, long pot life, excellent adhesion and hardness, and faster drying.

Specifically, **Hybrane<sup>TM</sup> CY245** can reduce the spray booth cycle time from 30 to 15 minutes at 60°C ready to polish after cooling down. In normal conditions, this represents an increase of about 20% in productivity.

# If you are looking for versatility, look no further than **Hybrane™ CY245**



Covestro's new **Hybrane™ CY235** is a technology that can be used for a broad number of markets and applications, including topcoats for ACE and general industrial markets or primers for car refinish and auto parts.

A spin-off of CY245, **Hybrane™ CY235** enables lower curing temperature or higher throughput according to your needs, as well as offering good adhesion and faster drying. If you're looking for coating excellence, look no further than CY235.

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Covestro's **Hybrane™** is a technology that can be used for a broad number of markets and applications, including topcoats for ACE and general industrial markets.

### Unique modular technology

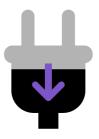
The high performance of the **Hybrane™** resin family all starts with its unique chemical structure, developed by Covestro's R&D teams. The hyperbranched polyesteramides offer a high functionality, combined with low viscosity due to the absence of entanglements. Because of this structure, the **Hybrane™** resin family can be used in a wide range of applications.

In addition, because the **Hybrane<sup>TM</sup>** molecules are built step by step, the unique molecular architecture can be built in one direction or another, according to specific requirements. This means that the **Hybrane<sup>TM</sup>** family of resins can be used to precisely and accurately meet the specific demands of parties across the value chain.

### A stronger coating performance

Above all, **Hybrane<sup>TM</sup>** enables coatings that meet the highest product standards, without fail. In fact, at 40°C, **Hybrane<sup>TM</sup>** outperforms regular high solid acrylics across a range of important performance indicators, including drying speed (both physical and chemical), sprayability, polishability, hardness and chemical resistance.

So, wherever a coating will be applied, and whatever challenges it will need to meet, you can rely on **Hybrane<sup>TM</sup>** to deliver next-level coating performances that endusers will appreciate aesthetically and for their ease of use. Specifically, **Hybrane<sup>TM</sup>** can offer operators either significant time savings and increased productivity, or reduced energy costs.







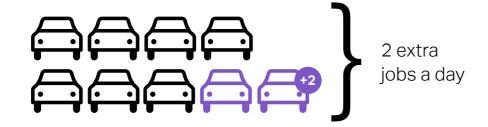
**Productivity gain** 

### More jobs in less time

**Hybrane™** resins unique chemical properties allow paint manufacturers to easily optimize their processes and operations. Because of the faster physical and chemical drying possibilities, the total cycle time can take place around 20% quicker.

Under typical workshop conditions, for example, car refinishers can paint two extra jobs every day, driving throughput and ultimately revenues.

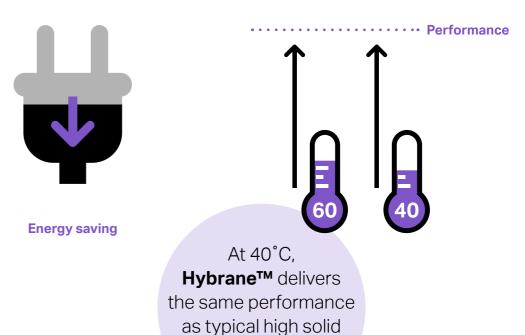
At 60°C **Hybrane™** dries
faster than
standard high
solid systems.



### An environmentally friendly choice

What's more, **Hybrane™** resins lower curing temperature at 40°C – compared to the 60°C of typical high solid acrylics – enables up to 48% less energy consumptions, leading to lower energy costs.

With manufacturers of agricultural and construction equipment, in particular, typically consuming large amounts of energy in heating up heavy substrates, this lower curing temperature is a crucial advantage.



systems at 60°C.

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### Watch this space

At Covestro, we are constantly developing our product offering to address the changing demands of our customers and end-users. Our **Hybrane<sup>TM</sup> CY245** and **CY235** products are opening up new horizons for the general industrial and car refinishing industries by driving coating performance and offering customers a more sustainable choice.

But we're not stopping here. In the coming years, we will leverage the unique qualities of our resins to develop our **Hybrane<sup>TM</sup>** products for a wider range of industries and also extending the application to different substrates like plastic and wood. Watch this space!



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<sup>1</sup>Please see the "Guidance on Use of Covestro Products in a Medical Application" document.

Edition: August 2021 · Printed in Germany