



NeoCryl® HP-4000

## High-performance, moisture-resistant wall paint.

Easy to formulate into high-humidity area paints.



## Opening up new horizons in formulating moisture-resistant paint

To meet the growing demand for healthier, longer-lasting wall paint solutions, Covestro has developed **NeoCryl® HP-4000**: an all-in-one solution for premium wall paints in high-humidity areas. Thanks to its perfect water vapor permeability, **NeoCryl® HP-4000** helps meet the need for moisture-resistant solutions in these areas. What's more, its cleanability and resistance properties further enable healthier, longer-lasting wall paint finishes in a variety of living environments. So, if you've been looking for a moisture-resistant solution that meets multiple demands, look no further.

## Key benefits of NeoCryl® HP-4000:



**Excellent water resistance**



**Perfect water vapor permeability**



**Scrub class 1**



**Good toughness - flexible and hard**



**Broad adhesion (including on walls, metal, wood, and tiles)**



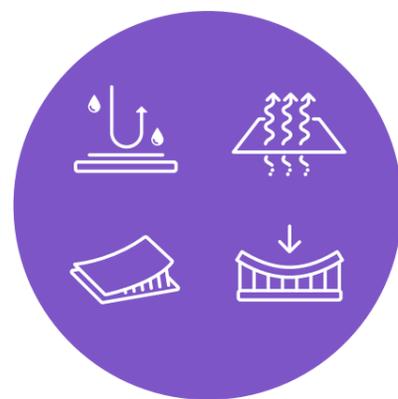
**Compliant with Eco-Label and Nordic Swan labeling**



## A growing need for moisture-resistant performance

Around the world, consumers are increasingly searching for more cleanable, stain-resistant wall paints that deliver high levels of functional performance – particularly in moist areas. But, all too often, the solutions available fail to meet these needs. In fact, stains, poor cleanability, scratches, and mold are some of the most common paint issues for end-consumers worldwide. This is reflected in the fact that the number of online searches related to stains has dramatically increased, and that stains and scratches are among the top five problems experienced in wall paints. In addition, manufacturers often need multiple resins for different application areas.

This innovative resin provides a single solution for high-humidity areas

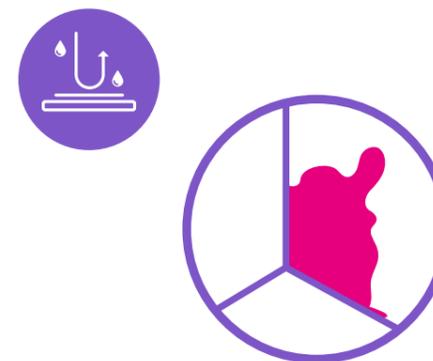


## An all-in-one solution

Of course, to address these issues, manufacturers need resins with the right properties. And, at Covestro, we have a long history in producing innovative, high-performance resins for the decorative market – in fact, our portfolio of technologies is one of the biggest in the coatings industry. All of this innovation is driven by the requirements of our customers and end-users, and by our commitment to driving healthier, more sustainable solutions.

Driven by this commitment, and leveraging our long expertise, we developed **NeoCryl® HP-4000**. A 100% acrylic self-crosslinking emulsion, this innovative resin provides a single solution for high-humidity areas, as well as enabling healthier, longer-lasting living environments. Specifically, its excellent early water resistance and low water uptake provide a unique moisture-resistant solution for moist rooms. At the same time, its excellent cleanability and resistance properties facilitate beautiful, longer-lasting paint finishes in a wide range of application areas – with less polishing and stain problems

**NeoCryl® HP-4000** formulates easily into hygienic paints for high-humidity areas



## Enjoy healthier living environments

**NeoCryl® HP-4000** is designed for tough applications: it can be easily formulated into hygienic paints for humid spaces. Specifically, its excellent early water resistance, low water absorption, and perfect water vapor permeability help meet the demand for better moisture-resistant performance. In particular, when tested against other benchmark paints for high-humidity areas, our resin demonstrated a low increase in weight after water exposure and a low moisture vapor transmission rate (MVTR).

Thanks to these properties, **NeoCryl® HP-4000** helps enable healthier living environments for consumers. Indeed, it meets all the functional requirements for high humidity applications. In this way, it can help deliver unique benefits and make a house a home.

Easier for end-consumers to clean without wear or damage



## Improved cleanability

**NeoCryl® HP-4000** also helps to meet consumer demand for better cleanability. Specifically, with a scrub class of 1, it produces paint finishes that are easier for end-consumers to clean without wear or damage. It also delivers excellent burnishing resistance across a range of different test conditions. Furthermore, in a range of washability tests using several different markings, **NeoCryl® HP-4000** scored very well, especially against highlighter, blue crayon, and orange marker. Indeed, on average, it performed equally to, or better than, the other benchmark resins tested.

**NeoCryl® HP-4000** also helps to prevent stains and other damage



## Resistance, resistance, resistance

As well as facilitating easy-to-clean paint finishes, **NeoCryl® HP-4000** also helps to prevent stains and other damage. For example, it delivers excellent resistance to staining from a wide range of different materials – achieving one of the highest scores when tested against other benchmark resins for high humidity area paints. In addition, it offers very low yellowing, a high elastic modulus, excellent König hardness, high tensile strength, and good toughness. All this means that it enables longer-lasting, cleaner paint systems for consumers to enjoy.

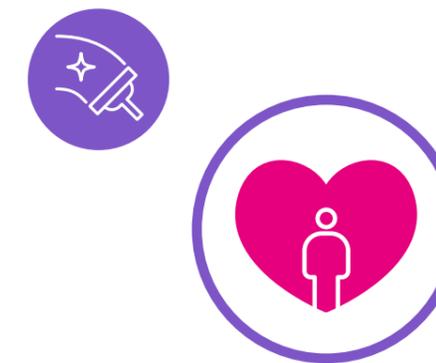
Broad adhesion, whether it's on walls, tiles, wood or metal



## Outstanding processability

In addition to meeting end-consumer demands, **NeoCryl® HP-4000**'s unique combination of properties also brings a range of benefits to paint manufacturers and converters. In particular, by providing an all-in-one solution for high-humidity areas, **NeoCryl® HP-4000** helps simplify supply decisions for manufacturers. Additionally, it's easy for formulators and applicators to work with, delivering great drying times, good blocking, low sagging and film tension, and broad adhesion, whether it's on walls, metal, wood, and tiles.

Low VOC content makes it safer for end-consumers and applicators alike

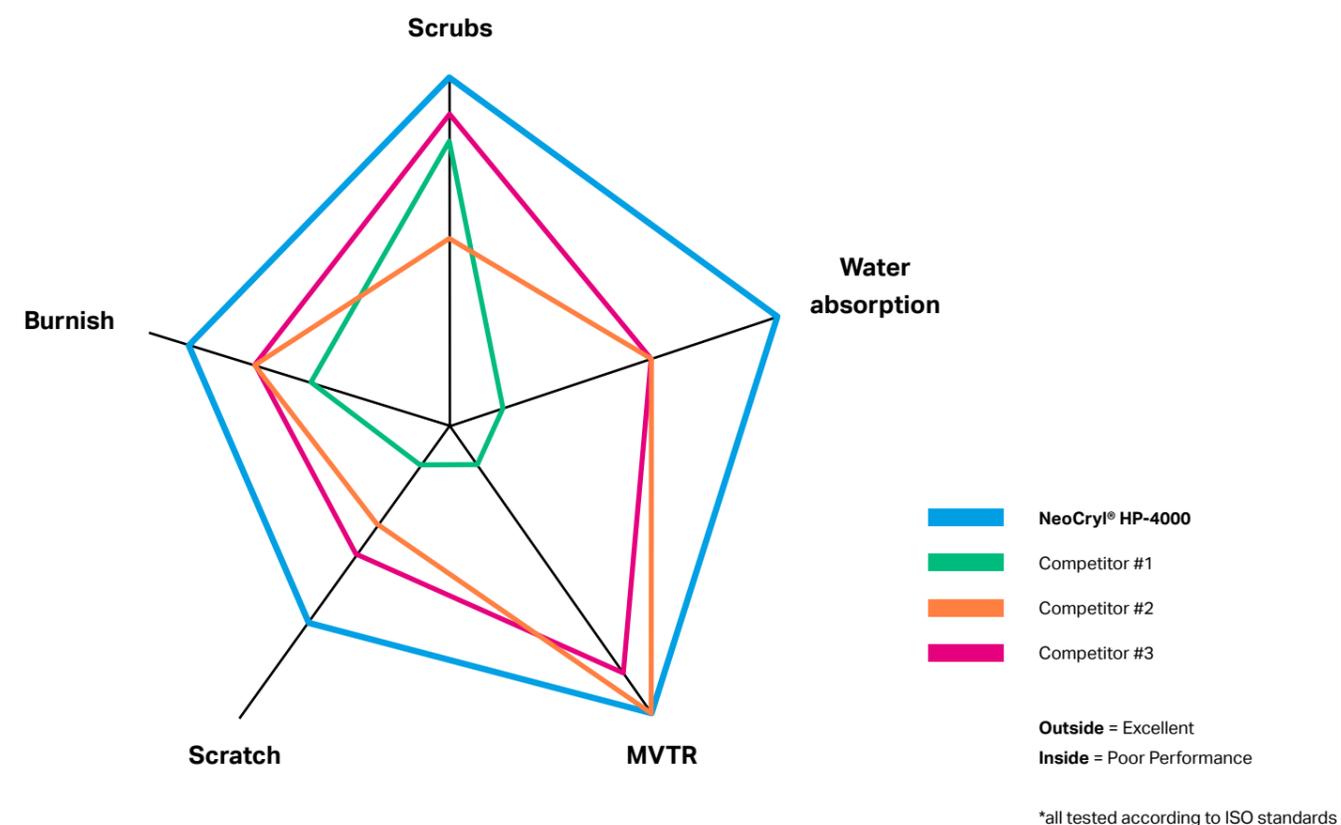


## Opening horizons for safe, sustainable wall paint

This unique combination of properties also means that **NeoCryl® HP-4000** enables healthier, more sustainable wall paints for decorative applications. For instance, its low VOC content makes it safer for end-consumers and applicators alike. And, thanks to its outstanding cleanability and resistance properties, it also allows paint systems to last longer, with less frequent recoating – helping mitigate the depletion of natural resources.

## We don't only promise... we deliver

### NeoCryl® HP-4000 in wet-room and bathroom wall paints



## Keeping ahead of the curve

With these benefits, **NeoCryl® HP-4000** will drive better paints and make the world a brighter place for end-consumers and paint manufacturers alike. But we're not stopping here. Over the coming years, we'll continue to investigate what our customers and consumers in the decorative market are looking for. We'll use these insights, along with our skills and expertise, to develop new, high-performance products. Products that facilitate cleaner, healthier living environments for consumers, while also providing efficient, workable solutions for paint manufacturers.

But we also want to work directly with you – to exchange industry insights and advice, and to adapt our solutions. So, if you've got an application requirement we haven't covered in this brochure, and you think **NeoCryl® HP-4000** could support you, don't hesitate to reach out to us for a discussion. We'll work together to tailor a solution to meet your specific needs – and to drive a brighter future for decorative wall paints.



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

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