



"BIO" WATER-BASED COATINGS FOR EXTERIOR FURNISHINGS
A NEW HORIZON OPENS UP FOR ENVIRONMENTAL SUSTAINABILITY



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A fruitful collaboration project with the prominent Dutch firm DSM has given rise to a new water-based coatings line for exteriors called ARBOREA BIO.

High performance standards and total respect for the environment

The new ARBOREA BIO coatings have been made with materials whose renewable nature derives from innovative processes aimed at refining "waste" vegetable matter which cannot be transformed into food for humans.

These coatings, made from vegetable matter by the ICA Group, are resilient, resistant to chemicals and lightfast. They are also ideal for industrial processing, just like other corresponding oil-derived products from ICA.

They have been formulated with acrylic-based resins and, compared to other products on the market made with alkyd resins from renewable sources, they are quicker drying, harder and possess greater non-yellowing properties.

Bio-innovation for coatings: the collaboration project with DSM

The creation of an outstandingly innovative product like ARBOREA BIO was the result of several years of study, experimentation and collaboration with a major international player in the chemical industry - DSM. Acutely aware of the need for greater environmental sustainability, as early on as 2013, ICA Group's research and development laboratories began to devise and run tests on a new formula with a view to improving ICA's production mainstay – BIO water-based coatings. The range of products that emerged combines excellent performances with respect for the environment and favors a virtuous production cycle.

The joint project with DSM, a technologically weighty partner with extensive experience in producing resins from renewable sources, took the form of introducing innovative materials derived from renewable sources into the formula for water-based coatings.

ARBOREA BIO is the ICA Group's latest technological breakthrough and it is a high-performance product in technical terms which fully respects the environment and the well-being of its end users.

ARBOREA BIO: tested for biogenetics by the academic world

Tests have been run on ARBOREA BIO in conjunction with the University of Camerino and the La Sapienza University of Rome in order to assess the biogenetic nature of the materials used; this involves investigations into the carbon contained in the coatings to prove whether it comes from fossil sources or vegetable biomass. The C14 dating technique demonstrated that the renewable content percentage oscillated between 30% and 40%.

This method is further proof that ARBOREA BIO is not only an innovative product, but especially that it works for the environment and is human friendly.

The ICA Group has also created a range of BIO coatings formulated for treating interior furnishings: IRIDEA BIO.



The "bio-based" resins selected by the ICA Group have been produced in Holland by DSM and identified with the trademark Decovery®. This trademark will also be visible on ICA products belonging to the ARBOREA BIO range. The joint project with DSM has led to an agreement being reached involving a period of exclusive usage by ICA Group of Decovery® resins in the production of its BIO water-based coatings.

DSM is a global Life Sciences and Materials Sciences company active in health, nutrition and materials with 25,000 employees.

DSM delivers innovative solutions that nourish, protect and improve performance in global markets such as food and dietary supplements, personal care, feed, medical devices, automotive, paints, electrical & electronics, life protection, alternative energy and bio-based materials.

