

DACRYL®

CSR APPROACH

23

THE 10 POINTS DACRYL

- 1 100% made in France
- 2 100% recyclable / infinitely recyclable
- 3 92% light transmission
as transparent as crystal
- 4 2 times lighter than glass
- 5 2 times more resistant than glass
- 6 Closed material
naturally water repellent
- 7 Inert material / no migration
or physical alteration over time
- 8 UV resistant / no yellowing
- 9 Retains its physical properties
from -40° to + 100°C
- 10 Unique material manufactured
thanks to a labelled know-how



Dacryl, a manufacturer of synthetic crystal decorative panels, is a French family-owned company committed to environmental protection and sustainable development.

In terms of ecology and ethics, we do everything possible to create value and improve our working environment.

As a player in the acrylics industry, we are aware of our role in the improvement of the circular economy.

We are committed to through

rules and values

but also through various actions that are part of our "raison d'être".



The Dacryl material is made from an acrylic monomer, otherwise known as methyl methacrylate or MMA.

Monomers are molecules mostly derived from coal or oil, which are the basis of plastics.

To manufacture our panels, we transform this monomer, through a polymerization cycle, into a polymer.



By heating the material hardens and creates natural exotherm, which contributes to the energy needed for its polymerization.



We create a physical process of molecular bonding activated by a low temperature heating of the monomer, about 50°C.



At the beginning of 2023, we were able to integrate this new process into our production cycle, which enabled us to reduce our energy consumption

by almost 40%.



This principle allows Dacryl to considerably reduce its energy consumption and to widen the gap with glass production.

Because, like PMMA, glass can be recycled endlessly, but its melting temperature is 1500°C,

its carbon footprint is much higher than that of plastic:

345 grams of CO₂ for a glass bottle, versus 129 grams for a plastic bottle.

Our material works on the basis of a

" circular economy "

The action of polymerization that allows us to create our panels and to pass from the liquid state to the solid state is totally reversible.

This means that we can completely recycle our material, and reuse it to create a new production.



Our manufacturing process does not involve additional components, such as catalysts or other additives.

This allows the various inclusions to remain unaltered in the material and also brings technical and mechanical advantages.

The manufacturing of a Dacryl panel is done thanks to a temperature cycle (polymerization) which is a physical phenomenon, not a chemical one.

Our average production time for a 15 mm thick panel is about 18 hours.



In fact, Dacryl uses the principle of flat polymerization by slow cycle to improve the molecular bonding, whereas conventional producers accelerate the polymerization process by varying the chemical composition of the product, the cycles and the production times.

In comparison, our manufacturing process gives the material high mechanical strength and a high degree of purity completely recyclable without any residue.

Moreover, we manufacture on demand and custom-made: we do not build up stocks of materials, and manufacture according to customer orders: reasoned production, not industrial overproduction.

Historic acrylic production site, our Dacryl factory is located in the center of France, between

Nevers (58) and Moulins (03).

In operation for more than 40 years, this rural factory creates an economic dynamic in the Centre region.



We've put together a young team with a creative profile and sensitive to environmental issues. We support them every day in their tasks, while encouraging them to participate in the continuous improvement of the company.

This applies to production, organization and well-being in the workplace. Our manufacture is also supported by long-serving employees who have acquired unique and recognized technical skills.

They help us pass on our know-how, so that together we can create the team of tomorrow.



We give priority to long-term contracts and invest as much as possible in the region.

In fact, we have always worked with

regional companies and art workshops with specific skills.



COLLECTION

RECYCLED MATERIALS

by Dacryl

After several months of product development, market research and discussions with manufacturers, we have developed a collection of recycled Dacryl materials made in our workshops in central France.

This collection of 6 references uses our production off-cuts and those of players in the agricultural and industrial sectors.

For a rendering

Terrazzo

each scrap is meticulously sorted.

These are then crushed and recoated in recycled PMMA using a cold polymerization process that requires no energy.



100% recycled & 100% recyclable
MATERIAL

Thanks to this unique technique, we are asked by different manufacturers and luxury brands to give new life to waste materials from wood, textiles and paper.