CELLÍDOR®

Bio-based cellulose esters

Cellídor® – the name refers to thermoplastics that have already been on the market for nearly a hundred years, yet cellulose ester-based compounds are anything but outdated.

Based on cellulose drawn from sustainable, natural resources, Cellídor® is a bio-based plastic that has been established in the market for decades and has already demonstrated its value in countless application areas. Cellídor®'s profile of properties is unique within the polymer world:

Surface, color and feel: Cellídor® is an amorphous thermoplastic offering a very high degree of light transmission. Its surface is characterized by an elegant gloss with brilliant depth of color, practically limitless dyeability and a pleasant horn-like feel. It also has a self-polishing effect: scratches on the surface buff out with use, so the plastic retains its high-quality surface over long periods of time.

Mechanics: Cellídor® features particularly high impact strength even at temperatures below freezing. Its toughness and stiffness can be adjusted with the help of plasticizers to make it suitable for a broad spectrum of applications.

Durability: Cellídor® is resistant to water, grease, mineral oils and sweat. The right additives can easily make it UV and weather-resistant, ensuring its stability in permanent outdoor use. Cellídor®'s optical and mechanical properties thus remain intact even after long-term use.

Processing: The Cellídor® portfolio includes products for both injection molding and extrusion. It can be used to realize thin or thick-walled injection molding parts and extruded pipes or profiles. Metal inserts can also be overmolded without difficulty.

CELLÍDOR®

CELLÍDOR®: advantages at a glance

- Cellulose ester is from sustainable cellulose sources
- Exceptional transparency
- Brilliant depth of color
- Self-polishing effect ensures permanently high surface quality
- High impact strength
- Special grades suitable for UV and weather resistance
- No sensitivity to stress cracking

Cellídor® CP

- Cellulose-Acetate-Propionate (CP)
- Standards with 8-20 % phthalate-free plasticizer
- Food compliant grades available

Cellídor® B

- Cellulose-Acetate-Butyrate (CAB)
- Standards with 5-20 % phthalate-free plasticizer
- UV- and weather resistant grades for permanent outdoor use

Material	Tensile modulus ISO 527-1/-2 [MPa]	Tensile stress at yield ISO 527-1/-2 [MPa]	Tensile strength at break ISO 527-1/-2 [MPa]	Tensile elongation at break ISO 527-1/-2 [%]	Charpy impact strength (23 °C) ISO 179/1eU [kJ/m²]	Charpy notched impact strength (23 °C) ISO 179/1eA [kJ/m²]	Vicat B50 ISO 306 [°C]	Application
Cellídor® B 531-07	1700	42	40	15	no break	13	95	Pipe extrusion, roof ledges
Cellídor® B 631-10	1600	37	33	20	no break	18	90	Profiles, pipes, trim strips
Cellídor® CP 2810-11	1500	40	35	20	no break	18	96	Ski goggles
Cellídor® CP 300-10	1950	45	38	15	no break	20	96	Parts for hearing aids
Cellídor® CP 300-13	1500	35	32	20	no break	25	85	Cosmetical products and office supplies
Cellídor® CP 300-18	1300	28	-	40	no break	30	75	Glasses frames
Cellídor® CP 310-10	2100	40	35	15	no break	15	95	Thick-walled body trims
Cellídor® CP 400-10	1700	40	35	30	no break	20	93	Writing utensils, oil tanks, tool grips
Cellídor® CP 400-17	1300	28	28	22	no break	30	72	Safety goggles
Cellídor® CP 410-10	1800	35	43	12	no break	28	96	Screw driver handles
Cellídor® CP 410-18	1350	26	24	30	no break	35	70	Fishing baits

Additional products and information are available on request.

Cellídor® is already in use in many industries, for example:

- Writing utensils
- Office supplies
- Glasses
- Cosmetic products
- Tool and knife handles
- Oil-contacting containers and parts
- Profiles (including advertising industry)
- Transparent pipes
- Jewelry
- Electronics (e.g., remote controls)

HEAD OFFICE

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