MOCOM

Cellidor®
Natural talent

**Cellidor® – 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that have already been on the market for nearly a hundred years, yet cellulose ester-based compounds are anything but outdated.**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, Cellidor® is a partially bio-based plastic that has been established in the market for decades and has already demonstrated its value in countless application.

Surface, color and feel: Cellidor® 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 and a pleasant feel. It also has a self-polishing effect.

Mechanics: Cellidor® features particularly high impact strength even at low temperatures. Its toughness and stiffness can be adjusted to make it suitable for a broad spectrum of applications.

Durability: Cellidor® 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. Cellidor®'s optical and mechanical properties thus remain intact even after long-term use.

Processing: The Cellidor® portfolio includes products for both injection molding and extrusion.

**Cellidor®: the 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**

## Cellidor® CP

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

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

Additional products and information are available on request.

## Cellidor® 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)

**MOCOM Compounds GmbH & Co. KG**
Mühlenhagen 35 | 20539 Hamburg
T +49 40 78105-720 | sales@mocom.eu
T +49 40 78105-710 | technical@mocom.eu
**www.mocom.eu**