

BASF's Ultradur® polybutylene terephthalate (PBT) is an excellent material for high-performance secondary fiber optic cabling.

Ultradur®'s properties for this application include excellent chemical resistance, hydrolysis resistance, dimensional stability, resistance to weathering and heat aging, as well as low coefficient of thermal expansion, high stiffness / hardness and good tribological properties.

In particular, the high viscosity PBT enables a one-step process, which minimizes time and energy required for the production of fiber optic cables.

Ultradur® B 6550 LN uncolored

 which is modified with a lubricant and nucleating agent to provide a faster speed of crystallization.
The higher crystallinity results in higher stiffness and higher production line speed.



All-round perfect protection for cables, connectors and cable grommets

Cables, energy leads and control cables are the nerve cords which link our highly technical society. At the same time, these nerve cords have to stand up to the toughest conditions in vehicles, mining, engineering and offshore exploration. Any interruption to efficient functioning causes loss of production, downtime and control faults.

The winning protection: made from Elastollan®

There is more than one good reason to protect valuable cable systems reliably: best of all, with a jacketing made of Elastollan[®]. Elastollan[®] protects against mechanical, thermal, chemical, microbiological and climatic influences.

Elastollan® is the polyurethane elastomer from BASF which is processed by thermoplastic processing. Thanks to its multi-talented portfolio of properties Elastollan® provides ideal solutions to the most diverse demands of jacketing for cable cores. Wherever the uncompromising reliability and endurance of cables, connector plugs and grommets are at stake, they need the best available all-round protection.



The top performer in all areas: Elastollan®

Cable jacketing made of Elastollan® for carrying signals or energy is at home anywhere in the world: it satisfies the whole spectrum of demanding, high performance applications ranging from 4,000 m down in the ocean depths, up to a height of 10,000 m. Elastollan®; being the leader in all areas, includes the comprehensive property portfolio its cable jacketing offers, covering the whole range of chemical, mechanical, biological and climatic requirements which flexible cable jacketing needs to meet.





Charging cable safe with Elastollan® and Ultramid®

Charging systems for electric and hybrid cars have to withstand the stresses of delivering high levels of electricity. It also has to endure the rigors of the outdoors — exposure to the elements, vandals and the occasional bump from a car. For the jacketing of charging cables, Elastollan® thermoplastic polyurethane (TPU) is an ideal choice as it increases durability and possesses excellent low-temperature flexibility. Connectors made with Ultramid® have high mechanical strength, stiffness and thermal stability.

Elastollan® 1185A10FHF Elastollan® 1190A10FHF Elastollan® 1192A10FHF Ultramid® A3X4G7

Reaching new record temperature with innovative HPM types of Elastollan®



Elastollan® HPM meets the requirements of high-temperature class D

The result is called Elastollan® 785 A 10 HPM. This innovation links the excellent properties of TPU and the demands of temperature class D. Elastollan® 785 A 10 HPM easily passed the tests of the hot air variations required by ISO 6722: 3000 hours at 150°C, 240 hours at 175°C and 6 hours at 200°C, as well as 3000 hours in humid heat (85% relative humidity at 85°C).

Cabling which is near axles and wheelboxes must meet the most testing demands. Stone impact, vibration, humidity and temperature fluctuations all challenge the integrity of the cable surfaces. Weak spots in the jacketing are knock-out criteria when it comes to the choice of a suitable material.

When temperature class C is no longer sufficient

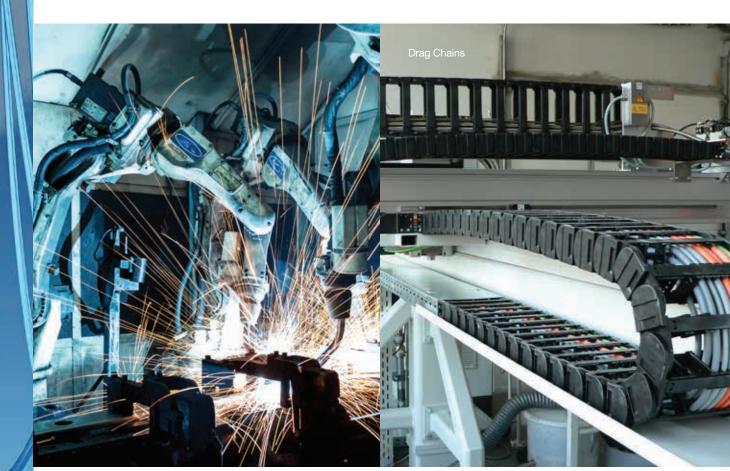
For years Elastollan® has successfully been meeting the demands of temperatures ranging between -40°C and + 125°C (Class C in accordance with ISO 6722). This is why Elastollan® has securely established itself as the jacketing material for both ABS and ESP cabling.

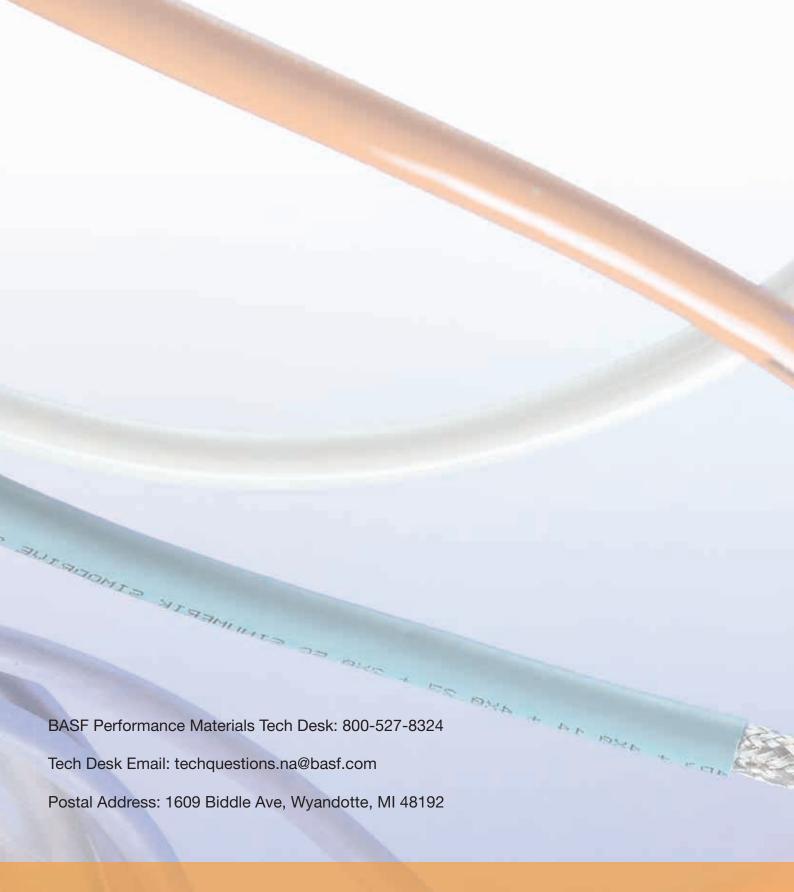
In the engine compartment or near brake linings however, temperatures can easily go beyond 125°C. This end of the temperature range always used to be the domain of crosslinked materials or fluoropolymers, but these materials are either very expensive or require complex processing. This prompted BASF to develop an economical alternative made from Elastollan®.

Cables for industrial robots and drag chains durable with Elastollan®

Cables for industrial robots need to be flexible, abrasion resistant and resistant to dynamic fatigue. Sheathed with Elastollan® thermoplastic polyurethane (TPU), cables for industrial robots can achieve a long lifetime. This is attributable to the excellent mechanical properties of Elastollan®, whichincludes resistance against oils and chemicals, flame retardancy and very low smoke density.

Elastollan® 1185A10FHF Elastollan® 1190A10FHF Elastollan® 1192A10FHF Elastollan® SP3092A10HFFR





Note:

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