Chimassorb[®] 2020

The advanced light stabilizer for tapes and monofilaments





More than a conventional HALS

- Higher light stability
- Higher long-term thermal stability
- Prolonged end-product life
- Smoother processing and lower maintenance costs

The advanced light stabilizer for tapes

Chimassorb[®] 2020 is a high-molecular-weight, hindered amine light stabilizer (HALS) with excellent polymer compatibility and high extraction resistance. It combines exceptionally high UV and long-term thermal stability in the presence of polymers, and is further distinguished by properties such as minimal pigment interaction and improved process control.

A wide variety of applications

Chimassorb[®] 2020 is suitable for polypropylene (PP) and high-density polyethylene (HDPE) tapes. It can also be used in numerous other applications. These are described in a separate brochure.

Stable at high temperatures

- Molecular weight: 2,600-3,400 g/mol
- Melting range: 120–150 °C
- Volatility (TGA*, in air at 20 °C/min)
- Temperature at 1 % weight loss: 290 °C
- Temperature at 10 % weight loss: 355 °C

High performance in processing and end use

Chimassorb[®] 2020 has numerous advantages over standard HALS. With its higher light and long-term thermal stability, it not only facilitates processing and equipment maintenance but also helps to prolong the life of the end product.

Polypropylene tapes

Chimassorb[®] 2020 strikes a unique balance between light, process & long-term thermal stability and processability, and has the added advantage of approval for food applications. In combination with low-molecular-weight HALS, e.g., Uvinul[®] 4050 and Tinuvin[®] 770, it achieves synergies useful in both food and non-food applications.

^{*} TGA = Thermogravimetric analysis

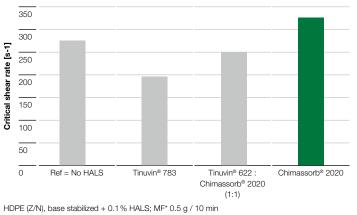




High-density polyethylene tapes

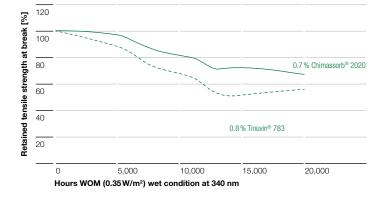
Thanks to its excellent light stability, Chimassorb[®] 2020 promotes the retention of mechanical properties after light exposure, improving tape quality. During manufacture, it helps to lower the tendency to melt fracture, making it suitable for highly demanding processing conditions involving high shear rates. Better melt flow control reduces die build-up, optimizes filter pressure and allows longer running times, resulting in more stable processing and reduced maintenance costs.

Shear rate to first appearance of melt fracture (MF*)



Measurement on a 40-hole die

* MF = Melt flow



Performance of linear low-density polyethylene (LLD-PE) tapes under Xenon light Artificial weathering of tapes

For more information on Chimassorb[®] 2020, please contact your local plastic additives representative or visit **www.plasticadditives.basf.com**.

No die build up with Chimassorb® 2020



Chimassorb® 2020



State-of-the-art HALS

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The Chemical Company

Note

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