

Chimassorb® 2020

The advanced light stabilizer
for polypropylene fibers,
yarns, nonwovens and carpets





More than a conventional HALS

- Smoother processing
- Increased productivity
- Lower fiber production costs
- Prolonged end-product life
- Reduced interaction with pigments

The advanced light stabilizer for polypropylene fibers, yarns, nonwovens and carpets

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 improved pigment dispersion and process control.

A wide variety of fiber applications

Chimassorb® 2020 is suitable for all polyolefins, especially

- Polypropylene (PP) fibers and staple fibers, e.g., geomembranes and packaging
- PP fibers and yarns for automotive interiors and carpets
- PP spun-bond nonwovens for colored, outdoor and high-temperature applications

Stable at high temperatures

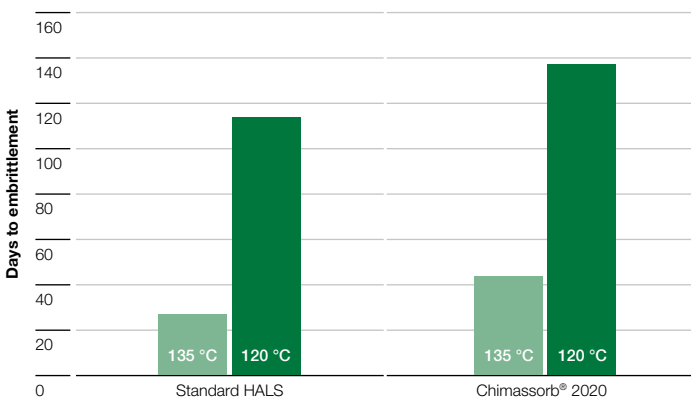
- Molecular weight: 2,600–3,400 g/mol
- Melting range: 120–150 °C
- Volatility (TGA*, in air at 20 °C/min)
 - Temperature at 1 % weight loss: 290 °C
 - Temperature at 10 % weight loss: 355 °C

Further end uses are PP and polyethylene (PE) tapes. These applications are described in a separate brochure.

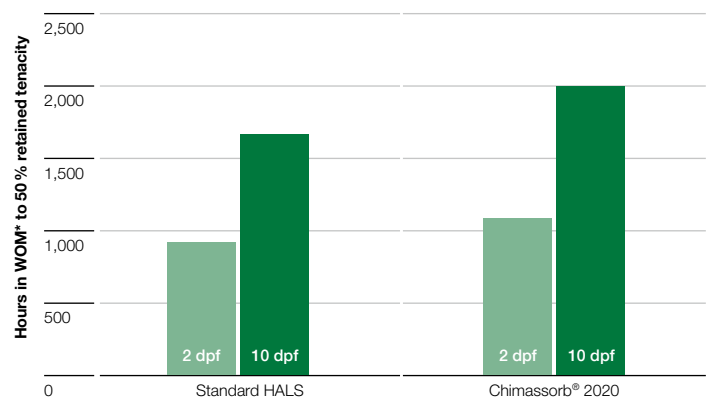
* TGA = Thermogravimetric analysis

High performance in processing and end use

Chimassorb® 2020 has numerous advantages over standard HALS.



PP homopolymer, MF* 4 (230 °C / 2.16), 1-mm compression-molded plaques
 Stabilization: 0.1 % HALS + 0.15 % Irganox® B 215 + 0.05 % Ca stearate
 * MF = Melt flow



Base: 0.3 % HALS + 0.2 % Irganox® B 501W + 0.1 % Ca stearate + 0.25 % TiO₂
 Exposure: WOM* dry, 0.5 W/m²; bst 65 °C
 * WOM = Weather-Ometer® test



Improved long-term thermal stability

High resistance to critical temperature conditions facilitates processing and prolongs end-product life.

Excellent light stability

Chimassorb® 2020 performs especially well in fine fibers and thin sections, prolonging the life of textiles and outdoor items.

Minimized interaction with fillers and pigments

Chimassorb® 2020 facilitates color matching, improves final product quality and helps to reduce coloration costs because it interacts very little with fillers and pigments and has excellent dispersion properties.

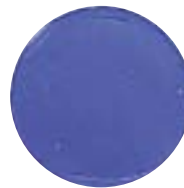
Optimized melt flow control

Higher stability during processing is achieved with Chimassorb® 2020 because it helps to control melt flow properties. This enables longer running times and reduces the formation of decomposition products. Optimum throughput increases productivity and lessens the need for equipment cleaning as well as lowering the number of filter changes required.

No HALS



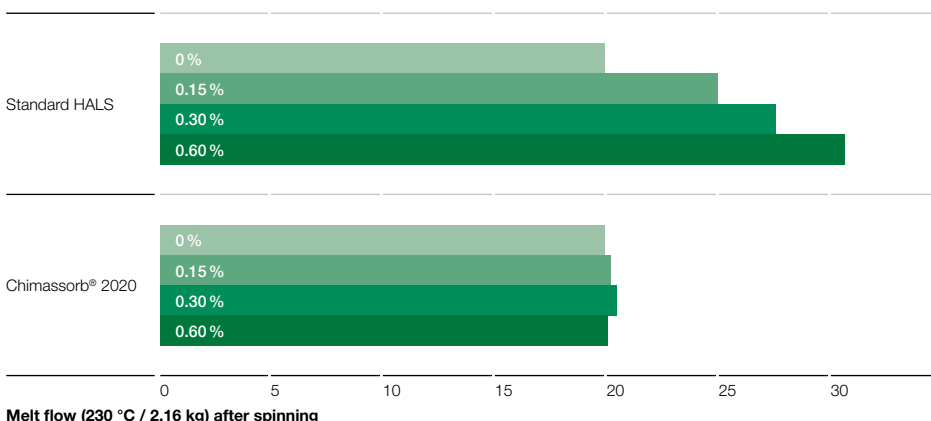
Standard HALS



Chimassorb® 2020



Base stabilization: 4 % TiO₂ + 0.25 % HALS
Pigmentation: 0.3 % Blue 15



Melt flow (230 °C / 2.16 kg) after spinning

Base: 0.2 % Irganox® B501W + 0.10 % Ca stearate + 0.25 % TiO₂
Spinning: at 270 °C, multifilament: 370/37 dpf

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

Asia**BASF East Asia**

Regional Headquarters Limited
 Plastic Additives
 45th Floor, Jardine House
 No.1 Connaught Place
 Hong Kong
 Phone: +852 2731-0111

Europe**BASF Schweiz AG**

Plastic Additives
 Klybeckstr. 141
 4057 Basel
 Switzerland
 Phone: +41 61 636-1111

Middle East**BASF Plastic Additives**

Middle East S.P.C., Bahrain
 International Investment
 Park (BIIP)
 Road 1518, Al Hidd,
 Kingdom of Bahrain
 Phone: +973 17 585 252

North America**BASF Corporation**

Plastic Additives
 100 Park Avenue
 Florham Park, NJ 07932
 USA
 Phone: +1 973 245-6000

South America**BASF S. A.**

Plastic Additives
 Sede Administrativa
 Av. das Nações Unidas,
 14.171, Morumbi
 04794-000 São Paulo, SP
 Brazil
 Phone: +55 11 2039-2273



www.plasticadditives.basf.com

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