



SABIC® LLDPE M500026

Linear low density polyethylene for masterbatch compounding

General information. SABIC® LLDPE grades are available in a wide range of viscosities. Supplementary to this, various grades are also available in powder form. This unique combination makes SABIC® LLDPE grades extremely suitable for masterbatch and compounding applications.

The SABIC® LLDPE portfolio offers an excellent choice to find a good base resin for both additives, black, white and colour masterbatches, with varying amounts of additives and pigments.

Health, Safety and Food Contact regulations. Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available on the Internet (www.SABIC-europe.com). Additional specific information can be requested via your local Sales Office.

Quality. SABIC Europe is fully certified in accordance with the internationally accepted quality standard ISO 9001-2000. It is SABIC Europe's policy to supply materials that meet customers specifications and needs and to keep up its reputation as a pre-eminent, reliable supplier of e.g. polyethylenes.

Storage and handling. Polyethylenes resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

Environment and recycling. The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.



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Description

SABIC® LLDPE M500026 is a high flow linear low density polyethylene copolymer grade with a narrow molecular weight distribution.

Application

SABIC® LLDPE M500026 resin is recommended for injection moulding masterbatch where a high filler acceptance is required, combined with a good flow.

Processing conditions

Typical moulding conditions for SABIC® LLDPE M500026 are: material temperature 180 - 230 °C (355 - 450 °F).

Mechanical properties

Test specimen is prepared from compression moulded sheet made according to ASTM D-1928, procedure C.

Typical data.

Revision 20060418

Properties	Units SI	Values	Test methods
Polymer properties			
Melt flow rate (MFR) at 190 °C and 2.16 kg	g/10 min	50	ASTM D 1238
Density	kg/m ³	926	ASTM D 1505
Mechanical properties			
Tensile test			ASTM D 638
stress at yield	MPa	13	
stress at break	MPa	12.4	
strain at break	%	120	
secant modulus at 1% elongation	MPa	354	
Izod impact notched at 23 °C	J/m	450	ASTM D 256
Hardness Shore D	-	55	ASTM D 2240
ESCR	h	2	ASTM D 1693
Thermal properties			
Vicat softening temperature at 10 N (VST/A)	°C	88	ASTM D 1525
Brittleness temperature	°C	<-75	ASTM D 746