

SABIC® LDPE 2102X0

LOW DENSITY POLYETHYLENE

DESCRIPTION

SABIC® LDPE 2102X0 is a grade typically used in foam applications.

Application

SABIC® LDPE 2102X0 can be typically used for all types of foam, produced with chemical blowing agents or physical gases, X-linked and non X-linked.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

TYPICAL PROPERTY VALUES

Revision 20210111

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Melt Flow Rate (MFR)			
at 190 °C and 2.16 kg	1.9	dg/min	ISO 1133
Density	921	kg/m ³	ASTM D1505
MECHANICAL PROPERTIES			
Tensile test			
stress at break	13	MPa	ISO 527-2
strain at break	850	%	ISO 527-2
tensile modulus	175	MPa	ISO 527-2
stress at yield	9	MPa	ISO 527-2
Modulus of elasticity	250	MPa	SABIC method
Hardness Shore D	46	-	ISO 868
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST/A)	89	°C	ISO 306
DSC test			
avg. heat of fusion	110	J/g	DIN 53765
crystallization temperature	97	°C	DIN 53765
melting point	108	°C	DIN 53765
ELECTRICAL PROPERTIES			
Volume resistivity	8.5E15	Ω.cm	ASTM D257
Dissipation factor at 60 Hz	5.0E-4	-	ASTM D150
Dielectric constant at 60 Hz	2.2	-	ASTM D150
Dielectric strength at 2000 V/sec	>30	V/μm	ASTM D149

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 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 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.

DISCLAIMER

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