VESTAMID® Terra DS22 natural color

Polyamide 1010

Evonik Industries AG

Message:

HIgh viscosity, polyamide 1010
VESTAMID®Terra DS22 natural color is a high viscosity PA 1010 basic polymer. VESTAMID Terra DS22 is semi-crystalline, which is the reason for its high mechanical resistance and chemical stability. It absorbs only little water. As a result its mechanical properties vary little when exposed to changing environmental humidity, and the material features a high dimensional stability.
VESTAMID®Terra DS22 can be used to manufacture films with good transparency. The high melting point of VESTAMID Terra DS22 compounds results in a high heat deflection temperature that can be advantageous for some applications.
VESTAMID®Terra DS22 occupies a position between the high-performance long-chain polyamides such as PA 12 and PA 1212 and the standard polyamides PA 6 and PA 66, which have a shorter chain length.
Because of its chemical and physical properties, and the plant origin of its monomers, VESTAMID Terra DS22 is an interesting addition to conventional longer-chain polyamides, and it also meets the growing demand for materials made from renewable raw materials.
VESTAMID® Terra is a group of new polyamides, the monomers for which are based entirely or partly on renewable raw materials.
VESTAMID® Terra DS is the polycondensation product of 1,10-decamethylene diamine (D) and 1,10-decanedioic acid (sebacic acid—S). Because both monomers are extracted from castor oil, VESTAMID® Terra DS is based on natural, renewable resources up to 100%.
Global Warming Potential (GWP) 2.8kg CO2 by Evonik, PE International.

General Information			
Features	Good Dimensional Stability		
	High Clarity		
	High Viscosity		
	Low to No Water Absorption		
	Renewable Resource Content		
	Semi Crystalline		
Uses	Film		
Appearance	Natural Color		
Forms	Granules		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density (23°C)	1.05	g/cm³	ISO 1183
Water Absorption (Saturation, 23°C)	1.8	%	Internal Method
Viscosity Number	220	cm³/g	ISO 307
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1700	MPa	ISO 527-2
Tensile Stress (Yield)	54.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2
Yield	5.0	%	
Break	> 50	%	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	14	kJ/m²	
23°C, Complete Break	11	kJ/m²	

Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Vicat Softening Temperature			
--	196	°C	ISO 306/A
--	171	°C	ISO 306/B
Melting Temperature [1]	200	°C	ISO 11357-3
Additional Information	**Nominal Value**	**Unit**	
Renewable Carbon Conent	100	%	
NOTE			
1.	2nd Heating		

Recommended distributors for this material

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