

TECHNICAL DATA SHEET

Polipropileno, Polietileno & Masterbatch.

Type:	Homopolymer
Product Name:	ESENTTIA 01H41

Characteristics: Low melt flow rate Homopolymer polypropylene with excellent mechanical properties and color, excellent gage control and high melt strength.

Recommended for: Extrusion of strapping, sheets, Cartonplast, extrusion thermoforming, extrusion blow molding of bottles, injection molding of heels, extrusion and injection molding general purpose applications.

Property	English Units	SI Units	ASTM Test
Melt Flow Index (230°C - 2.16 Kg.)	1.4 g/10min.	1.4 g/10min.	D-1238 B
Tensile yield strength (50 mm/min.)	4900.0 psi	33.78 MPa	D-638
Tensile yield elongation (50 mm/min.)	10.5 %	10.5 %	D-638
Flexural modulus 1% secant (1.3 mm/min.)	210000.0 psi	1447.9 MPa	D-790-1A
Notched Izod Impact strength (23 °C/73 °F)	0.9 ft-lb/in	48.04 J/M	D-256-A

@ Type I specimen, 3.2 mm thick injected according with ASTM D 4101 09 method. Values shown are averages and should be taken as a guide and not to be interpreted as product specifications. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product. These values may shift as additional data are accumulated; ESENTTIA shall not be under a duty to notify you any changes to the specifications, therefore we advise the receiver to ask for a new declaration periodically.

IMPORTANT: The information contained herein corresponds to typical values and should be considered as a guide in the behavior and applicability of our resins and it is based on the data available to us and is believed to be correct as the date of publication, however we make no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from user thereof or for any printing errors. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product. In view of the many factors that may affect processing and application, these data do not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws are observed. ESENTTIA declines all responsibility that may arise directly or indirectly, from the use of such information nor do we offer any warranty or immunity against patent infringement.

NOTICE REGARDING MEDICAL APPLICATIONS RESTRICTIONS: ESENTTIA do not recommend any of its products or sample products for use in (A) in any commercial or development applications which is intended for contact with human internal body fluids or body tissues, regardless of the length of time involved. (B) In any cardiac prosthetic device applications, regardless of the length of time involved, including without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems and ventricular bypass assisted devices. (C) As a critical component in any medical device that supports of sustains human life: and (D) specifically by pregnant women or in any applications designed specifically to promote or interfere with human reproductions.

ESENTTIA does not endorse or claim suitability of their products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the ESENTTIA's product is safe, lawful, and technically suitable for the intended use. ESENTTIA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY ESENTTIA'S PRODUCT FOR USE IN MEDICAL APPLICATIONS.

Recommendations before using ESENTTIA's products: We suggest when using ESENTTIA's products for the first time, making test in the appropriate industrial quantities to examine the possibilities of using our products in all stages of your processing. This declaration applies to the material as it leaves its production facilities and does not cover any additive, pigment, etc., subsequently included by the converter. It is responsibility of the customer to obtain all necessary information relating to the third party materials and ensure that ESENTTIA's products when used together with these materials are suitable for the customer's particular purpose. No liability can be accepted in respect of the use of ESENTTIA's products in conjunction with others materials.

NOTE: Food contact articles or articles which will be subjected to any kind of treatment such as sterilization and ozonation, a FDA certificate should have to be requested www.esenttia.co or contacting our Customer Service. ESENTTIA shall not be under a duty to notify you any changes to the regulations.

STORAGE: Storage time of natural materials longer than 6 months may have a negative influence on the quality of the final product (for example brightness). It is recommended to convert all materials latest within 6 months of production.

The product should be stored in dry conditions at temperatures below 40 °C and protected from UV-light. Improper storage can initiate degradations, which results in odor generation and color changes and can have negative effects on the physical properties of the product. If polymer is stored in conditions of high humidity and fluctuating temperatures, then atmospheric moisture can condense inside the packing. If it happened, it is recommended the pellets to be dried before use. During storage polypropylene should not be exposed to UV radiation. Producer does not take responsibility for any damages caused by adverse storage.

Unless otherwise agreed in writing, the exclusive remedy for all claims is replacement of the product or to reimburse of the purchase price at ESENTTIA's option, and in no event shall ESENTTIA be liable for special, consequential, incidental, punitive, or exemplary damages.

ESENTTIA's products do not have additives with metals or other substances on purpose of oxi-degradation. These additives and the decomposition and disintegration of polypropylene caused by oxi-degradation phenomenon can cause environmental pollution, decrease the package performance and increase migration of package constituent to food, compromising resin approval regarding the requirements of Legislations, Recommendations or Communications related. The use of these additives with ESENTTIA products implies immediate loss of performance guarantee described in this technical data sheet.