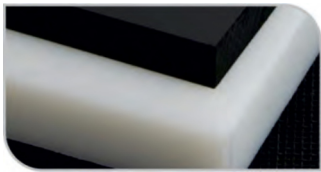


## Engineering Plastics



### TYNALENE HD300 - NATURAL

#### GENERAL

Density	0.955 g/cm <sup>3</sup>	ISO 1183	DIN 53479
Water absorption in air 50% r.h.	0 %	ISO 62	DIN 53715
Absorption 23-C in water-saturation	0.02 %	ISO 62	DIN 53495
Food Compliance - YES		FDA / BfR	

#### MECHANICAL PROPERTIES

Tensile stress at yield at break	30 N/mm <sup>2</sup>	ISO 527	DIN53455
Elongation at break	500 %	ISO 527	DIN53455
Tensile Modulus of elasticity	800 N/mm <sup>2</sup>	ISO 527	DIN53455
Compression test 1% strain 1000h	3 N/mm <sup>2</sup>	ISO 899	DIN53444
Impact strength Charpy 7,5 J	no break	ISO R179	DIN53453
Notched impact strength Charpy	12 KJ/ mm <sup>2</sup>	ISO179/3C	DIN53453
Ball indentation hardness	40 N/mm <sup>2</sup>	ISO2039.1	DIN53456
Shore hardness (D)	D63	ISO2039.2	DIN53456
Coefficient of friction to steel <sup>[12]</sup>	0.32	ISO 8295	DIN 53375





#### THERMAL PROPERTIES

Melting point	130 °C	ISO 3146	
Thermal conductivity	0,39 W/(km)	ISO 22007.2	DIN 52612
Deformation at temperature HDT <sup>[15]</sup>	45 °C	ISO75	DIN 53461
Linear expansion coefficient 23-60°C	180 x 10 <sup>-6</sup> K <sup>-1</sup>	ISO 11359	DIN 53752
Operating temperature continuously <sup>[17]</sup>	80 °C		
Operating temperature short period-no load <sup>[18]</sup>	90 °C		
Minimum operating temperature <sup>[19]</sup>	-50 °C		
Flammability UL 94 (3-6 mm thickness)	HB		UL94
Oxygen index (LOI)	18 %	ISO4589	DIN 22117






#### ELECTRICAL PROPERTIES

Dielectric constant at 1 MHz	2.3	ISO 250	DIN 53483
Dielectric strength	45 KV/mm	ISO 243	DIN 53481
Volume resistivity	10 <sup>15</sup> Ωcm	ISO 93	DIN 53482
Dissipation factor tan Δ at 1MHz	0.0006	ISO 250	DIN 53483

#### Characteristics:

-  Extremely Light Weight & Tough
-  Excellent Wear Resistance
-  Good Chemical Resistance
-  Low Co-efficient Of Friction

#### Applications:

-  Chemical Vessels
-  Storage Tanks
-  Conveyor Components & Rollers
-  Cutting Boards
-  Bulk Solid Bins & Hoppers

All statements, technical information and recommendations contained in this Technical Data Sheet are presented in good faith, but all information given is without warranty and liability. The reader is cautioned, however that Tynic Engineering Plastics cannot guarantee the accuracy or completeness of this information and it is the customer's responsibility to determine the suitability of Tynic Engineering Plastics products in any given application.