radilon[®] TT

HIGH PERFORMANCE POLYMERS



The **Radilon® TT** identifies the **long molecular chain PA1012** grades that have been developed for injection moulding and extrusion.

These products, **made with 43% renewable source materials**, are polymerized from 1,10-diamine and dodecanedioic acid. 1,10-diamine is obtained from sebacic acid, a substance of biological origin obtained from castor oil plant (Ricinus communis) seeds.



The main properties of the product Radilon[®] TT are very **low water absorption**, **high chemical resistance**, good **flexibility** and **ease of processing** with **energy savings** - also thanks to its relatively low melting point and lower density.



Radilon[®] TT grades

Product name	Product description	Main characteristics
Radilon® TT E100 100 NT PA1012 injection moulding grade	PA1012 injection moulding grade, partially biobased. Natural colour.	Suitable for parts requiring flexibility, good dimensional stability and good property retention after moisture absorption.
Radilon® TT E100 100C NT PA1012 extrusion grade	PA1012 extrusion grade, partially biobased. Natural colour.	Suitable for parts requiring flexibility, good dimensional stability and good property retention after moisture absorption. A low extractable grade with high burst pressure resistance.
Radilon® mixloy TT HSE10 100C NT PA1012/HDPE extrusion grade	PA1012 extrusion grade, partially biobased with improved flexibility. Natural colour.	Suitable for parts requiring improved flexibility, good dimensional stability and good property retention after moisture absorption. A low extractable grade with high burst pressure resistance.
Radilon® TT P25 100 NT PA1012 injection moulding grade, high flexibility	PA1012 injection moulding grade, partially biobased with improved flexibility and good bending resistance. Natural colour.	Suitable for parts requiring improved flexibility and bending resistance, good dimensional stability and good property retention after moisture absorption.
Radilon® mixloy TT HSE20UK 100 NT PA1012/HDPE injection moulding grade	PA1012/HDPE injection moulding grade, partially biobased with improved flexibility. UV stabilized. Natural colour.	Suitable for parts requiring improved flexibility, good dimensional stability and good property retention after moisture absorption and UV ageing.

Main applications



Automotive

Properties like good processability during the extrusion process, plus high burst pressure resistance and good flexibility, make our Radilon[®] TT suitable for automotive piping applications. It does not require a pre-drying step before extrusion. Radilon[®] TT grades are also characterized by low value soluble and insoluble components and very good property retention after moisture absorption. An application example is in-tank hose.

Hose in Radilon® TT E100 100C NT.

Consumer goods

Properties such as high flexibility, good surface appearance and low water absorption mean our Radilon®TT is ideal for consumer goods products. An application example is sport shoe insoles, for which Radilon®TT can offer high bending resistance and good bonding

to TPU and synthetic shoe material.

Shoe insoles in Radilon® TT P25 100 NT.



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RADICI NOVACIPS SPA (Headquarters) - Via Bedeschi, 20 - Chignolo d'Isola 24040 (BG) - IT



