

Poliestere (polietilene tereftalato - PET)

Polyester (polyethylene terephthalate - PET)

MATERIALE • MATERIAL

Poliestere con densità da 170T / 190T / 210D / 300D / 600D secondo l'utilizzo • Polyester with density from 170T / 190T / 210D / 300D / 600D according to use.

COLORE • COLOR

Colore personalizzabile con riferimento Pantone® • Customizable color with Pantone® reference

PERSONALIZZAZIONE • CUSTOMIZATION

Stampa serigrafica, transfer o sublimazione • Screen, transfer or sublimation printing.

RICICLABILITÀ • RECYCLABILITY



Riciclabile nella raccolta differenziata "Indumenti", secondo le direttive del comune • Recyclable in the "Clothes" separate collection, according to the directives of the municipality.

PRODUZIONE • MANUFACTURING

Prodotto in Cina o Europa • Made in China or Europe

CERTIFICAZIONI • CERTIFICATION

Possiamo offrire il prodotto in RPET (poliestere riciclato) con certificazione GRS • We can offer the product in RPET (Recycled Polyester) with GRS certification:

Polyethylene terephthalate (PET), fossil fuel based

Punteggio Higg Index/SAC (Sustainable Apparel Coalition) per la materia grezza (1 Kg) prima della lavorazione.

Metodologia di punteggio: la procedura per convertire i dati del punto medio LCIA in punteggi ambientali per le categorie di impatto misurato LCIA (Life Cycle Impact Analysis / Analisi dell'impatto del ciclo di vita)

Biogenic* Carbon Content & Water Consumption do not count towards the final MSI score

Global Warming	Biogenic* Carbon Content	Eutrophication	Water Scarcity	Water Consumption	Resource Depletion, Fossil Fuels	Chemistry
2.72	-	0.46	0.40	-	5.20	1.91

Description

Polyethylene terephthalate (abbreviated as PET or PETE, CAS number 25038-59-9) is a very common linear polymer best known for its use in manufacturing plastic bottles. Two major production paths are used in producing polyethylene terephthalate, the older process involving transesterification of dimethyl terephthalate as a precursor, and a more recently developed process relying on the direct esterification of terephthalic acid with ethylene glycol, modeled here. The terephthalic acid route is preferred for its higher reaction rate, production of high molecular weight polymer chains, and lower use of ancillary inputs. In this reaction, ethylene glycol and terephthalic acid are combined in the liquid phase with a catalyst, resulting in the esterification of the terephthalic acid. After the separation of unreacted ethylene glycol, the reaction product is vigorously mixed with a catalyst to instigate the polycondensation reaction, resulting in the final polymer product.

Modeling Notes

Data from Sphera: Polyethylene terephthalate bottle grade granulate (PET) via PTA

<http://gabi-documentation-2020.gabi-software.com/xml-data/processes/4b2420b3-8f56-45f1-984d-173a9298ef4a.xml>

Higg MSI Methodology and Data Version 3.5 (Last updated: December 2022)

<https://portal.higg.org/60c4de463454b7000bf12149/product-tools/msi-v2/example-materials>

