

SORONA® ENVIRONMENTAL DATA SHEET



	OUR PRODUCT	CONVENTIONAL PRODUCT	SUBSTITUTE PRODUCT
BACKGROUND INFORMATION			
Product Name	DuPont™ Sorona® renewably-sourced polymer	PTT-01	Nylon
Chemical Name	poly (trimethylene terephthalate)	poly (trimethylene terephthalate)	polyamide (Type 6)
Major Uses	Textile & carpet fiber	Textile & carpet fibers	Textile & carpet fibers
DuPont Manufacturing Location	Kinston, SC, USA; Jiangsu, China (DuPont licensee Zhenjijiang Glory)	n/a	n/a
CRADLE-TO-GATE MANUFACTURING PARAMETERS			
Greenhouse Gas Emissions kg CO2 equivalents/kg	3.38 ^{1,2}	Propylene route: 4.42 ¹ Ethylene oxide route: 4.04 ³	9.1 ⁴
Non Renewable Energy Consumption MJ/kg	83.8 ^{1,5}	Propylene route: 101.2 ^{1,5} Ethylene oxide route: 94.6 ³	120.5 ^{4,5}
PRODUCT PROPERTIES			
Renewable content % by weight	37%	0%	0%
Biobased Carbon Content % by weight ⁶	28%	0%	0%
Biodegradability ⁷	n/a	n/a	n/a
Compostability ⁸	no	no	no
Other Information	Recyclability of Sorona® in the PETE waste stream is being established via Association of Postconsumer Plastic Recyclers (APR) guidelines		
References	<ol style="list-style-type: none"> Peer-reviewed LCA of Bio-PDO / Sorona production (Peer reviewer: Prof. Konrad Saur, Five Winds International) includes bio-based carbon stored in product G. Elliott, L. Cisneros, R. Ramachandran "A Life Cycle Assessment of Corterra Polymer" (May 12, 2005) PlasticsEurope (March 2005), A. Boustead, Ecoprofiles of the European Plastics Industry, Polyamide 6 (Nylon 6) (www.lca.plasticseurope.org/) based on higher heating values (HHV) ASTM Standard D 6852: Standard Guide for Determination of Biobased Content, Resources Consumption, and Environmental Profile of Materials and Products ASTM Standard E1720 Standard Test Method for Determining Ready, Ultimate, Biodegradability of Organic Chemicals in a Sealed Vessel CO2 Production Test ASTM Standard D6400 Standard Specification for Compostable Plastic 		

DuPont™ Renewably Sourced™ Materials contain a minimum of 20% renewably sourced ingredient by weight.