

2020.9.24 Unitika Trading Co., Ltd. DDP Specialty Products Japan K.K.

Regarding of the development of "Palpa Made With Sorona[®] polymer", optimizing "Sorona[®]" by DuPont de Numours Inc.

Unitika Trading Co., Ltd has succeeded in developing a new spun yarn, "Palpa Made With Sorona[®] polymer". It applies the partially bio-based Poly Trimethylene Terephthalate (PTT) resin, "Sorona[®]" made by DuPont Specialty Products and Unitika Trading's unique multi-layer yarn technology, "Palpa Formula".

According to UNFCCC, 10% of the greenhouse gas emissions are caused by the fashion industry which comes in second only after the oil industry. Unitika Trading has been incorporating SDGs (Sustainable Development Goals) from an early stage and has come up with concrete measures for the topics that concern all textile manufacturers namely energy, water, and harmful chemical substances.

Furthermore, climate change countermeasures and the promotion of circular economy are indispensable as the spread of new coronavirus causes major changes in people's lifestyles and corporate activities around the world.

DuPont[™] Sorona[®] polymer is a PTT resin which contains 37% plant origin ingredients developed by the biotechnology of DuPont[™] and minimizes the impact on the environment without sacrificing quality and performance. Sorona[®] polymer offers unique performance benefits for the apparel industry, including excellent softness, stretch and recovery.

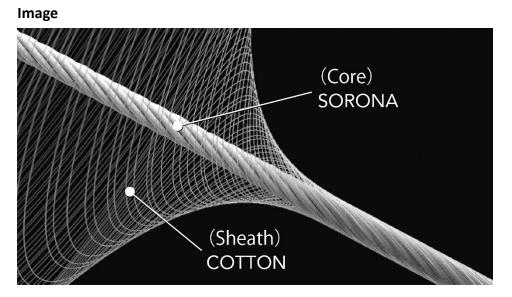
Unitika[™] "Palpa" is a multi-layer yarn that uses polyester for the core and cotton for the sheath. It has the softness of cotton as well as the high-strength properties of a polyester blend, and is more resistant to wrinkling than cotton and has excellent wash recovery. It is also superior in water absorption, quick drying and static electricity control even compared to polyester.

"Palpa Made With Sorona[®] polymer" is a new material developed by both companies to complement each other's technology and achieve the goal of a sustainable society and a comfortable life for people in partnership.

The material combines the best features of PTT fibers. It has a certain amount of elasticity and firmness, yet it has a softer feel to it and its good stretchability ensures a comfortable wearability of the final product. This environmentally friendly and functional material reduces our impact on the global environment and enhances people's lives with its improved easy-care properties, quick-drying water absorption and pilling performance.

Additionally, Unitika Trading joins the "Sorona[®] Common Thread Fabric Certification Program" and expands its sales of "Palpa Made With Sorona[®] polymer" in the global market with the certified brand of "Sorona[®] Luxe".

As noted above, Unitika Trading is going to introduce "Palpa Made With Sorona[®] polymer" into a wide range of fields, from fibers for garment uses to household goods as a stress-free comfortable material with reliable environmental performance.



Summary of multi-layer yarn "Palpa Made With Sorona® polymer"

- 1. Features
 - (1) Soft hand-feel
 - (2) Comfortable due to less tight feeling
 - (3) Stretchable
 - (4) Water-absorption and quick-dry
 - (5) Anti-pilling
 - (6) Easy-care





2. Performance

Stretchability (JIS L 1096)		
Weft	After 1 min.	After 1hour
Palpa Made With		
Sorona [®] polymer	18.4%	19.5%
30/2 (E/C 40/60)		
Blank	12.3%	13.1%
E/C 40/60		

Anti-pilling comparison (JIS L 1076 ICI 5hr)		
Palpa Made With		
Sorona [®] polymer	3.5 grade	
40/1 (E/C 40/60)		
Blank	0 mada	
40/1 (E/C 40/60)	2 grade	

Sample: Oxford woven fabric

Sample: Jersey knitted fabric

3. Items

Yarns, textiles (both woven and knitted) and garments (both OEM and ODM)

4. Applications

Fibers for garment uses (sports, outdoor, uniform and ladies and men's fashion) and household goods

- Promotional channels
 Owned promotional channels and web sales
- 6. Expected release date November, 2020
- Sales goal
 First year: Three hundred million JP Yen
 Second year: Ten billion JP Yen
 Third year: Twenty billion JP Yen

Reference: Company Profile

DDP Specialty Products Japan K.K.

President: Yoshiyuki Tanaka
Location: Sanno Park Tower, Nagata cho 2 chome 11-1, Chiyoda ku, Tokyo, Japan
Established: July, 2016
Business Activities: Production, export, sales, research and development, technical service and joint ventures

Unitika Trading Co., Ltd

President: Masahiro Hosoda

Location: Metlife Hommachi Square, 2-5-7 Hommachi, Chuo-ku, Osaka, Japan

Established: April, 1942

Business Activities:

- •Domestic and export/import as well as manufacture, process and sales textile materials and various textile products
- •Domestic and export/import as well as manufacture, process and sales films, resins and nonwovens products
- ·Production and sales of various kinds of industrial materials
- ·Production and sales of household goods, business goods and various kinds of materials