Technical Specifications

1. Starch-pac Biodegradable Rolled Sheet

Product code **:** 2000 SBRS

Product description : Rolled sheet for thermoforming

Compositions : Compounds of biotechnological processed starch, biodegradable plastics, plasticizer and performance improvement additives.

Applications : packaging partitions, food serviceware, agricultural trays made by thermoforming process

Typical Properties :

Specific gravity (g/cm3) average		1.17
Tensile Strength at Break (kgf/cm2)	MD	121
	TD	114
Elongation at Break (%)	MD	310
	TD	650
Bio contents (%)		>60
Microwavable temperature		< 130 C
Frozen temperature		- 32 C <
Biodegradability		do not degrade in storing condition, biodegradable by nature

2. Starch-pac Thermoplastic Starch Rolled Sheet

Product code : 2100 STPS

Product description : Rolled sheet for thermoforming

Compositions : Compounds of gelatinized starch, plastic, plasticizer, performance improvement additives

Applications : packaging partitions, food serviceware, disposable fruit trays

Typical Properties :

Specific gravity (g/cm3) average		1.1
Tensile Strength at Break (MPa)	MD	53
	TD	31
Elongation at Break (%)	MD	300
	TD	620
Bio content (%)		>60
Micowavable temperature		< 100 C
Frozen temperature		-20 C <
Biodegradability		biodegradable by nature

3. Starch-pac PLA Compound Rolled Sheet

Product code : 2200 SPLA

Product description : Rolled Sheet for Thermoforming

Compositions : Compounds of poly lactic acid (PLA), plasticizer, calcium carbonate, performance improvement additives

Applications : packaging partions, diary containers, food serviceware, hinged-ware,cup

Typical Properties :

Specific gravity (g/cm3) average		1.24
Tensile strength at break (MPa)	MD	53
	TD	30
Elongation at break (%)	MD	200
	TD	340
Bio content (%)		> 70
Microwavable temperature		< 100 C
Frozen temperature		32 C <
Biodegradability		biodegradable by composting

4. Starch-pac PLA + NR Rolled Sheet

Product code : 2300 PLANR

Product description : Rolled Sheet for Thermoforming

Compositions : Compounds of poly lactic acid (PLA) , natural rubber (NR), performance improvement additives

Applications : packagings, stationery folders, boxes, displayed sheets.

Typical Properties :

Specific gravity, ASTM D792 (g/cm3) average	0.992 +/- .008
Tensile strength , ASTM D638, 25 KN load cell, tension rate 100 mm/min (MPa)	14.36 +/- 0.59
Young's Modulus (MPa)	334.91 +/- 6.77
Elongation at break (%)	381.5 +/- 44.3
Bio content (%)	>95
Biodegradabilty	biodegradable by nature

5. Starch-pac Bio-TPE 1 Resin

Product code : 3000 Bio-TPE 1

Product description : Resins for injection molding

Compositions : Compounds of plastics , natural rubber, additives

Applications : to replace PP injection molded parts, boxes, stationeries, gifts,etc.

Typical Properties :

Durometer hardness (Shore A)	80-95
Tensile strength at break (MPa)	5-19
Elongation at break (%)	300-500
Melt Flow Index (g/10 min at 230 C/2.16kg)	0.2-15
Bio content (%)	40-60
Biodegrdability	biodegradable in nature

N.B. Bio-TPE1 is custom compounded to customer's requirements.

6. Starch-pac Bio-TPE 2 Resin

Product code : 3100 Bio-TPE 2

Product description : Resins for injection molding

Compositions : Compounds of poly lactic acid (PLA), natural rubber (NR), additives

Applications : to replace PP, HDPE in injection molding of stationeries, boxes, frames, cases and gifts

Typical Properties :

Durometer hardness (Shore A)	80-95
Tensile strength at break (MPa)	5-19
Elongation at break (%)	300-500
Melt Flow Index (g/10 min at 230 C/2.16kg)	0.2-15
Bio content (%)	> 90
Biodegradability	fully biodegradable by nature

N.B. Bio-TPE 2 is custom compounded to customer's requirements.