

Bio-Based Jars & Caps with Cereplast Hybrid 103

Low Carbon Footprint
Uses Plant-based Resins



Bio-Based jar pictured with silver, non-Bio-Based cap.

Description

Bio-Based jars are **made** from a new hybrid resin blended **with 32% natural, renewable plant-based resin** and made from industrial-quality **starch derived from tapioca, potato** and other sources 68% virgin polypropylene to create an environmentally-responsible packaging alternative! According to Michigan State University and an independent testing laboratory, biopropylene resin **shows a 27% reduction in carbon dioxide** emissions relative to **traditional polypropylene components** – imagine what an impact your company can make to help the environment by switching to our Bio-Based jars!

Features & Benefits

- Material properties close to traditional PP – simplifies the amount of testing required to use our Bio-Based jars
- Plant-based resin made from industrial-quality starch derived from tapioca, potato and other sources – does not divert resources from the food supply but instead utilizes a by-product of food processing (same starch is used for paper, textiles and glue)
- Reduced energy expenditures as plant-based resins are obtained from renewable sources, produced at lower temperatures, require shorter cycle times – Lower carbon footprint than traditional PP jars
- Made in USA – Timely availability with world-class environmental and quality standards

Decoration Options

- Silk-screen
- Pressure-sensitive labels

To place an order or get more information, please contact your CSI Sales and Customer Service Representative:

**550 East Third Street
Oxnard, CA 93032-0832
Phone (805) 487-6698
Fax (805) 487-1967
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www.CSILLC.com



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Results of Product Stability Tests in Biobased Jars with Cereplast Hybrid 103

Product forms tested include: Body Cream, Hair Masque and Body Polish. Results shown below are consistent for all products tested.

TEST: Product in Package	METHOD	RESULTS		
		1 Month	2 Months	3 Months
Color of product	023FTT	Matches Standard	Matches Standard	Matches Standard
Odor of product	0030OLF	Matches Standard	Matches Standard	Matches Standard
Appearance	0030MFG	Matches Standard	Matches Standard	Matches Standard
Packaging Evaluation	023FTT 0030OLF 0030MFG	No leaking, No discoloration of package or product, no fading or smearing of label	No leaking, No discoloration of package or product, no fading or smearing of label	No leaking, No discoloration of package or product, no fading or smearing of label

MICRO TESTING	METHOD	RESULTS		
		1 Month	2 Months	3 Months
TPC	TM-01.0	<10	<10	<10
Yeast/Mold	TM-12B	<10	<10	<10
Enrichment	TM-01.1	No Growth	No Growth	No Growth
Pseudomonas	TM-01.1	Absence	Absence	Absence
S.aureus	TM-01.1	Absence	Absence	Absence
E.coli	TM-01.1	Absence	Absence	Absence

Incubator Temperature: 40 °C @ 75%RH +/- 5. All products were tested via accelerated temperatures.

Testing Performed By:



Micro Quality Labs
3200 N. San Fernando Blvd.
Burbank, CA 91504

Results show that Cereplast Hybrid 103 provides excellent packaging stability when tested at accelerated temperatures. Consider CSI's Bio-based jars and caps for your product line!



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