

TECHNICAL DATA SHEET

20oz PLA Compostable Clear Cups with Lids

Company Name: Xiamen Bioleader Environmental Protection Technology Co., Ltd.	Document No.: TDS-PLA-20OZ-2026.1	Version: 2026.1
Product Category: PLA Compostable Cold Cups - 20oz Series	Country of Origin: China	Website: www.cupschina.com

1. MATERIAL DATA

Property	Specification
Product Type	Disposable 20oz / 600ml PLA clear cold cup series with 90mm, 95mm and 98mm rim formats for larger cold beverage service
Material	PLA (polylactic acid), a bio-based clear plastic used for industrially compostable cold-cup applications
Appearance	Transparent / clear finish for beverage visibility and brand presentation
Nominal Capacity	20oz / 600ml for all three rim formats
Nominal Weight	90mm and 95mm formats: 12 g per cup; 98mm format: 13 g per cup (reference values subject to final order specification)
Cup Dimensions	90mm: 90 x 56 x 158 mm; 95mm: 95 x 55 x 150 mm; 98mm: 98 x 61 x 138.5 mm
Rim Compatibility	90 mm, 95 mm or 98 mm depending on selected model; matching flat, sip and dome lids available by rim size
Manufacturing Process	PLA resin preparation, sheet extrusion, thermoforming, trimming, rim finishing, inspection and packing
Recommended Use	Juice, iced coffee, cold brew, smoothies, milk tea, lemonade, fruit drinks, cold beverages and takeaway drink service
Temperature Limitation	Cold use only. Not suitable for hot filling, hot drinks, microwave heating, ovens or high-temperature storage
Compostability	Industrially compostable when the finished product is covered by valid certification and accepted by a suitable facility
Food Contact Compliance	Supporting documentation may include FDA 21 CFR, DIN EN 13432, ASTM D6400, BPI and SGS test reports for the confirmed SKU
Export Packaging	1000 pcs/carton for all three formats. Reference carton size: 47 x 37 x 54 cm. Insulated protection is available for qualified bulk orders.

2. PRINTING & DECORATION SPECIFICATION

Property	Specification
Printing Method	Dry-offset or other approved cup-printing process, subject to artwork and factory confirmation
Ink Type	Food-packaging-compliant ink suitable for exterior PLA cup printing
Printing Position	Outside cup surface only
Printing Colors	Single-color logo printing and multi-color cup body printing available; final color count depends on artwork and production feasibility
Color Standard	Pantone reference or CMYK process printing, subject to approved proof
Printable Area	Cup side wall; final print area depends on cup taper, rim clearance and artwork coverage
Limitation	Printed surface is not intended for direct food contact unless separately validated

3. PRODUCT DIMENSIONS & PACKING DATA

Nominal dimensions are expressed as Top Diameter x Bottom Diameter x Height. Final tolerances, cup weight, lid fit, packing and certification scope shall follow the approved order specification.

ITEM	Product Name	Material	Product Size (T x B x H)	Weight	Pcs/ CTN	Rim Size	Compatible Lids
20oz PLA Compostable Clear Cup Series - Cold Use Only							
PLA-20-90	20oz / 600ml PLA Cup	PLA	90 x 56 x 158 mm	12 g	1000	90 mm	Flat / Sip / Dome
PLA-20-95	20oz / 600ml PLA Cup	PLA	95 x 55 x 150 mm	12 g	1000	95 mm	Flat / Sip / Dome
PLA-20-98	20oz / 600ml PLA Cup	PLA	98 x 61 x 138.5 mm	13 g	1000	98 mm	Flat / Sip / Dome

3.1 Matching Lid Reference

Cup Format	Compatible Rim	Available Lid Options	Recommended Application
Tall Cold Cup	90 mm	Flat Lid / Sip Lid / Dome Lid	Juice, iced coffee, cold brew, milk tea and takeaway beverages
Tall Cold Cup	95 mm	Flat Lid / Sip Lid / Dome Lid	Juice, lemonade, iced coffee, smoothies and branded takeaway drinks
Wide Cold Cup	98 mm	Flat Lid / Sip Lid / Dome Lid	Smoothies, topping drinks, fruit beverages and premium cold beverage presentation

3.2 Technical Diagrams



Representative PLA cup construction. Exact resin grade, wall thickness and printing system are confirmed in the approved SKU specification.



Size overview of the 20oz / 600ml PLA cup series: 90mm, 95mm and 98mm rim formats with matching flat, sip and dome lid references.

4. PERFORMANCE & APPLICATION DATA

Property	Specification
Temperature Range	Recommended for cold food and cold beverages. Avoid exposure to elevated temperatures during storage, transport and use.
Typical Applications	Juice, iced coffee, cold brew, smoothies, milk tea, lemonade, fruit drinks, topping beverages and takeaway cold drinks.
Lid Fit Reference	Lid size must match the selected cup rim diameter. Functional fit shall be validated with the actual cup and lid batch before commercial use.
Print Suitability	Exterior printing available for branding and private-label programs, subject to artwork confirmation and production validation.
Stacking / Packing	Supplied in nested stacks and sealed sleeves; reference export packaging uses insulated protection for heat-sensitive PLA shipments.
End-of-Life Note	Industrial compostability claims apply only where the confirmed finished product is certified and where local collection and processing facilities accept the product.
Export Sensitivity	PLA is more heat-sensitive than PET; insulated packaging and temperature-aware logistics are recommended for hot routes and seasons.

4.1 Application Guidance

Use Category	Guidance
Recommended	Cold drinks, juice, iced coffee, milk tea, smoothies, fruit drinks, topping beverages and takeaway cold beverage service.
Conditional	Short-term refrigerated storage and long-distance export, subject to temperature protection, exact beverage type and transport validation.
Not Recommended	Hot beverages, hot filling, microwave heating, oven use, direct flame, pressure sealing or prolonged high-temperature storage.

5. PRODUCT IMAGES

Representative product images are shown below. Actual cup clarity, lid geometry, printing, packing and application appearance may vary by approved SKU and order specification.



20oz PLA size lineup: 90mm, 95mm and 98mm rim formats.



Representative matching flat, sip and dome lid combinations.



Application examples: juice, iced coffee, smoothies, milk tea and desserts.



Dimensional reference image for the complete 20oz PLA cup family.

6. COMPLIANCE & CERTIFICATES

Applicable product scope for this section: **Clear PLA Compostable Cup Series.**

Certificate / Document	Coverage / Description
BPI	Industrial compostability certification reference for clear PLA cup products.
DIN EN 13432	EU industrial compostability standard reference for clear PLA cup products.
ASTM D6400	US industrial compostability standard reference for clear PLA cup products.
FDA 21 CFR / SGS	Food-contact compliance and supporting third-party test-report reference.
Declaration of Conformity	Formal product compliance declaration for the confirmed product scope and order.

Certificates and Test Reports: <https://www.bioleaderpack.com/certificate/> Product Reference: <https://www.cupschina.com/pla-cups/>

Compliance note: certificate validity, declaration scope, printing ink compatibility and destination-market acceptance must be confirmed against the exact approved SKU and matching lid.

5. PRODUCT IMAGES - CONTINUED



Representative custom logo printing for 20oz PLA clear cups.



Representative multi-color full-body printing for private-label beverage programs.



1. Representative sealed sleeve packing for 20oz PLA cups.



2. Insulated inner-carton protection for long-distance PLA cup export shipping.



3. Export carton labeling for 20oz PLA cups: 47 x 37 x 54 cm; 1000 pcs/carton.

7. QUALITY CONTROL

Control Point	Inspection Scope
Incoming Materials	PLA resin / sheet, printing ink, lid material and supporting documentation are checked against approved specifications.
Sheet & Forming Control	Sheet thickness, heating profile, thermoforming stability, trimming and rim geometry are monitored.
Finished Appearance	Clarity, contamination, scratches, deformation, odor, print registration and visible defects are inspected.
Dimensional Check	Top diameter, bottom diameter, height, capacity, weight and rim profile are checked for all 20oz series models.
Lid Fit Check	Correct engagement, closure consistency, stacking and representative handling are evaluated with the confirmed lid.
Cold-Use Check	Representative cold beverage performance is evaluated under the approved internal QC procedure.
Packing Check	Sleeve quantity, carton count, insulated protection, labels, batch traceability and shipping marks are checked.

8. STORAGE, HANDLING & LIMITATIONS

Item	Details
Storage	Store in a clean, cool, dry and ventilated warehouse. Keep away from direct sunlight, heat, strong odors and high humidity.
Transport	Avoid prolonged high-temperature transport. Use insulated carton or container protection where required by route and season.
Stacking	Keep cartons upright and within approved stacking limits to prevent cup and rim deformation.
Shelf Life	Follow the current approved order specification. Use first-in, first-out stock rotation and inspect product condition before use.
Stock Rotation	Record batch / lot information and avoid extended storage in warm warehouse conditions.

8.1 Use Limitations

- Cold use only. Do not use for hot beverages, hot filling, microwave heating, ovens, direct flame or heating elements.
- Do not store or transport under prolonged high-temperature conditions without suitable thermal protection.
- Do not use as a hermetically sealed or pressure-resistant package.
- Maintain adequate headspace and validate the selected lid size with the actual cup batch.
- Compostability depends on the exact certified product, local collection system and availability of an accepting industrial composting facility.
- The customer shall validate printing, filling, storage, delivery and end-use performance under actual operating conditions.

Critical Limitation: PLA clear cups are designed for cold use and are temperature-sensitive. Industrial compostability claims do not mean home compostability, marine biodegradability or universal acceptance in local waste systems.

9. MANUFACTURER

Field	Details
Manufacturer	Xiamen Bioleader Environmental Protection Technology Co., Ltd.
Brand	Bioleader Cups
Country of Origin	China
Website	www.cupschina.com
Email	info@bioleaderpack.com
Address	No. 39 Xinglong Road, Xiamen, Fujian, China
Product Reference	https://www.cupschina.com/pla-cups/

9.1 Packing & Traceability

Packing Item	Requirement
Primary Packing	Sealed inner sleeves; final sleeve quantity and sealing method follow the confirmed order specification.
Outer Carton	Reference export carton size: 47 x 37 x 54 cm; standard pack quantity: 1000 pcs/carton.
Thermal Protection	Insulated carton liners and container-level thermal protection are available for qualified bulk orders.
Custom Shipping Marks	Custom-printed cartons, labels and private-label shipping marks are available subject to artwork confirmation.
Traceability	Production batch and raw-material lot records are maintained under the manufacturer quality system.

10. DOCUMENT CONTROL & DISCLAIMER

Version	Issue Date	Revision Description	Owner
2026.1	1st Jan 2026	Initial issue for 20oz PLA compostable clear cup series	Technical & Quality Department

The information in this document represents typical product data at the issue date and is provided for technical reference. It does not constitute a guarantee for every application. The approved sample, signed specification, purchase order, current certificate scope and destination-market requirements take precedence. Bioleader Cups reserves the right to update material grade, dimensions, packing or processes subject to contractual agreement.