DATASHEET

Battery Separator Discs φ18mm — 2320 / 2325 / 2500 | PP/PE/PP Trilayer & PP Monolayer | Na-ion K-ion Li-ion Li-S Cell Separator

φ18 mm pre-punched separator discs covering three mainstream membranes in one listing: 2320 (PP/PE/PP trilayer, 20 µm — thin, energy-dense), 2325 (PP/PE/PP trilayer, 25 µm — balanced workhorse), and 2500 (PP monolayer, 25 µm, 55% porosity — high-rate). Ready to load into CR2032 coin cells and 18 mm test hardware for Na-ion, K-ion, Li-ion and Li-S R&D.

APPLICATION

- **Fast CR2032 coin cell assembly** — Li-ion, Na-ion, K-ion and Li-S chemistries
- **φ18 mm test fixtures and Swagelok-type cells** — ready out of the pack
- **Rate-capability and fast-charge comparison studies** — 2500 (high flux) vs 2325 (balanced)
- **Lithium-sulfur (Li-S) cell R&D** — liquid / gel electrolyte configurations
- **Sodium-ion (Na-ion) and potassium-ion (K-ion) battery research**
- **Batch assembly and teaching labs** — no cutting, minimal lot-to-lot and operator variation

KEY SPECS

2. Product Details

LabCore φ18 mm discs are punched from industrial-grade polyolefin microporous membranes. Three mainstream grades ship from one listing, **ready to load with no cutting tools and no burred edges**. φ18 mm is a widely used separator diameter for coin-cell assembly and 18 mm test hardware.

Grade Selection Guide

Grade	Structure	Thickness	Porosity	Gurley	Best for
2320	PP/PE/PP trilayer	20 µm	39%	530 s	Thinner, energy-density-first
2325	PP/PE/PP trilayer	25 µm	39%	620 s	**Balanced workhorse** — safety + energy
2500	**PP monolayer**	25 µm	**55%**	**200 s**	**High-rate / fast-charge**, low impedance

- **Need thermal shutdown protection** → choose **2320 / 2325** (PE inner layer closes pores at high temperature)

- **Running rate-capability / high-power experiments** → choose **2500** (monolayer PP, 55% porosity, only 200 s Gurley — lowest ion-transport resistance)
- **Not sure?** → buy one 500 pc box of each and run a side-by-side comparison

> ⚠ **2500 is a monolayer PP membrane with no PE shutdown layer — it has no thermal shutdown function.** Choose 2320 / 2325 if your experiment needs high-temperature self-protection.

3. Order / Quote

Model	Pack Size	Availability
SEP-2320-D18	2320 Battery Separator Discs, φ18 mm × 500 pcs	Made to order (quote)
SEP-2320-D18-1K	2320 Battery Separator Discs, φ18 mm × 1000 pcs	Made to order (quote)
SEP-2320-D18-5K	2320 Battery Separator Discs, φ18 mm × 5000 pcs	Made to order (quote)
SEP-2325-D18-500	2325 Battery Separator Discs, φ18 mm × 500 pcs	Made to order (quote)
SEP-2325-D18-1K	2325 Battery Separator Discs, φ18 mm × 1000 pcs	Made to order (quote)
SEP-2325-D18-5K	2325 Battery Separator Discs, φ18 mm × 5000 pcs	Made to order (quote)
SEP-2500-D18	2500 Battery Separator Discs, φ18 mm × 500 pcs	Made to order (quote)
SEP-2500-D18-1K	2500 Battery Separator Discs, φ18 mm × 1000 pcs	Made to order (quote)
SEP-2500-D18-5K	2500 Battery Separator Discs, φ18 mm × 5000 pcs	Made to order (quote)

Current pricing and ordering: labcorematerials.com/products/18mm-separator-discs-2320-2325-2500/

Contact

business@labcorematerials.com

www.labcorematerials.com/products/18mm-separator-discs-2320-2325-2500/