

- Low maintenance design with no moving parts
- Equipped with liquid nitrogen level sensor, insulated case and lid safety interlock switch for operator protection (liquid nitrogen required for operation)
- Dual electromagnetic grinding technology
- Grinds samples in the 0.1 gram to 200 gram range
- Each grinding chamber holds one large grinding vial, one mid-size vial, four standard grinding vials, or four microvial sets

Some samples are impossible to grind at ambient temperatures. The Freezer/Mill is a unique grinding machine that uses liquid nitrogen to embrittle unconventional materials (that are difficult to grind at room temperature) and pulverizes them to a powder form without thermal degradation. Samples are placed in sealed cryogenic grinding vials then immersed in liquid nitrogen. The samples are cooled to cryogenic temperatures then ground by a magnetically shuttling impactor.

Since the vials are sealed, the cryogenic grinder maintains the integrity of its contents. Volatile compounds are retained, hazardous or critical samples are easily controlled, clean-up is simplified, and cross-sample contamination is eliminated.

#### **Features**



Intuitive color LCD touch screen controller



Magnetic grinding mechanism; no mechanical moving parts



Cole-Parmer®

Designed for vigorous horizontal milling



CG-200

Continuous cooling with liquid nitrogen sample vial immersion

## CG-500, CG-450, CG-400, CG-200 Freezer/Mill®

### Typical Applications Include

DNA/RNA extraction, forensic/pharmaceutical testing, RoHS/WEEE, consumer product testing, food safety, materials research, and medical research.

### Sample Types Include











Plastics & Polymers

**Animal Tissue** 

Pharmaceuticals

Cannabis

Yeast

### Before & After Samples – Bottle Caps





### Specifications – CG-500 Freezer/Mill

High-capacity cryogenic grinder with dual grinding and cooling chambers. It can grind and cool up to 200 g of samples (0.5 to 100 g per chamber). Each grinding chamber holds one large grinding vial, one mid-size vial, four small grinding vials, or four microvial sets each. Comes equipped with liquid nitrogen auto-fill.

| 115 VAC, 60 Hz or 230 VAC, 50 Hz |
|----------------------------------|
| 50.8 x 54.6 x 64.8 cm            |
| (20.0 x 21.5 x 25.5")            |
| 35.4 kg (78 lb)                  |
| 3 years                          |
|                                  |



## CG-500, CG-450, CG-400, CG-200 Freezer/Mill®

### Specifications - CG-450 and CG-400 Freezer/Mill

Large cryogenic grinder that accommodates up to 100 g of samples. It has one dual-purpose chamber that precools and grinds samples. Its grinding chamber holds one large grinding vial, one mid-size vial, four small grinding vials, or four microvial sets. The CG-450 comes equipped with liquid nitrogen auto-fill. The CG-400 is manually filled with liquid nitrogen.

| Voltage    | 115 VAC, 60 Hz or 230 VAC, 50 Hz |
|------------|----------------------------------|
| Dimensions | 52.0 x 55.0 x 46.0 cm            |
|            | (20.5 x 21.5 x 18.0")            |
| Net Weight | 20 kg (44 lb)                    |
| Warranty   | 3 years                          |



### Specifications – CG-200 Freezer/Mill

Compact cryogenic mill that accommodates samples from 0.1 to 5 g. It has one dual purpose chamber that precools and grinds samples. It can hold one small grinding vial, or three microvials.

| 5 VAC, 60 Hz or 230 VAC, 50 Hz |
|--------------------------------|
| 8.0 x 27.0 x 32.0 cm           |
| 9.0 x 10.5 x 12.8")            |
| .6 kg (18.9 lb)                |
| years                          |
|                                |



#### Need a Demo?

- Virtual sample processing virtual demonstration of the equipment and sample processing
- Physical sample processing physical testing of your sample with shared results
- Physical equipment testing a demo unit can be sent to your facility to test before purchasing

Contact us today at **sampleprep@antylia.com** for details.

# CG-500, CG-450, CG-400, CG-200 Freezer/Mill®

### **Ordering Information**

| Description   | Item Number |
|---|-------------|
| CG-500 Freezer/Mill, Dual Chamber Cryogenic Grinder, 115 VAC, 60 Hz                 | 04500-42    |
| CG-500 Freezer/Mill, Dual Chamber Cryogenic Grinder, 230 VAC, 50 Hz                 | 04577-94    |
| CG-400 Freezer/Mill, High-Capacity Cryogenic Grinder, 115 VAC, 60 Hz                | 04500-40    |
| CG-400 Freezer/Mill, High-Capacity Cryogenic Grinder, 230 VAC, 50 Hz                | 04577-92    |
| CG-450 Freezer/Mill, High Capacity Cryogenic Grinder with Auto-Fill, 115 VAC, 60 Hz | 04500-41    |
| CG-450 Freezer/Mill, High Capacity Cryogenic Grinder with Auto-Fill, 230 VAC, 50 Hz | 04577-93    |
| CG-200 Freezer/Mill, Compact Cryogenic Grinder, 115 VAC, 60 Hz                      | 04500-39    |
| CG-200 Freezer/Mill, Compact Cryogenic Grinder, 230 VAC, 50 Hz                      | 04577-77    |

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