



Freezer/Mill®

CG-200

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Cole-Parmer

CLOSE LID SLOWLY

Cole-Parmer®

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

# **Cryogenic Grinders**

- 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 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



Designed for vigorous horizontal milling



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.

Voltage	115 VAC, 60 Hz or 230 VAC, 50 Hz
Dimensions	50.8 x 54.6 x 64.8 cm
	(20.0 × 21.5 × 25.5")
Net Weight	35.4 kg (78 lb)
Warranty	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.

115 VAC, 60 Hz or 230 VAC, 50 Hz
52.0 x 55.0 x 46.0 cm
(20.5 × 21.5 × 18.0")
20 kg (44 lb)
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.

115 VAC, 60 Hz or 230 VAC, 50 Hz
48.0 x 27.0 x 32.0 cm
(19.0 × 10.5 × 12.8")
8.6 kg (18.9 lb)
3 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.

#### **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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