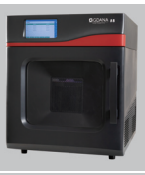
A8 Microwave Digestion Instrument



Introduction

GDANA Microwave Digestion Instrument utilizes self-developed microwave digestion technology, enabling efficient acid digestion of various sample types and significantly reducing pre-processing time. Its precise temperature and pressure control system ensures thorough and consistent digestion, effectively guaranteeing the recovery rate of target elements and measurement accuracy. Equipped with comprehensive safety protection mechanisms, it effectively manages operational risks in high-temperature and high-pressure environments. It is suitable for sample pre-processing in fields such as environmental monitoring, food, chemical, and pharmaceutical industries, making it an ideal pre-treatment companion for elemental analysis techniques like AAS, AFS, ICP, and ICP-MS.

Product Information

GDN-A8	
Batch Processing Capacity	40 Vessels
Vessel Volume	55mL
Inner Vessel Material	TFM
Vessel Protection Sleeve Material	560 (L)*630 (W)*635 (H)
Vessel Pressure Release Method	Vessel with Built-in Pressure Release Device
Microwave Source	Full Digital Microwave Source
Microwave Power	Continuously Adjustable from 0-100%
Magnetron Direction	Vertical/Horizontal Bidirectional
Temperature Measurement Method	Contactless Infrared Temperature Measurement
Temperature Measurement Points	2
Identification System	LED Color Light Identification System
Fan Type	Centrifugal Fan
Control Method	Touchscreen Control
Control System	Android Control System

Temperature Operation Curve Graph	√
Temperature Column Graph	√
Window	Explosion-Proof Visible Window
Protection Device	Door-Activated Power-Off Protection Device (0.1-Second Response)
Cavity Material	SUS 316 Stainless Steel Inner Cavity
Outer Shell Material	ABS
Temperature Control Range	Room Temperature -210℃
Instrument Dimensions	560*630*635 mm (L*W*H)
Shipping Dimensions	800*970*1040 mm (L*W*H)
Instrument Weight	~65 kg
Shipping Dimensions	~150 kg
Multi-step Programming	√
Maximum Number of Steps	20
Built-in Method Library	100+
Built-in Operation Videos	√
User Permissions	Upgradeable Three-level Permissions
Temperature Measurement Accuracy	±2℃
Operating Voltage	220V±10%
Power Consumption	3600W
Operating Temperature	0-40℃
Operating Humidity	15-80% RH
Data Export	USB/ Bluetooth

Standard Accessories

Item	Specification	Quantity
Microwave digestion vessel (inner vessel)	55mL，TFM	40
Microwave digestion vessel (outer vessel)	55mL，PEEK	40
Power cord	16A	1
Turnplate	40-position	1
Digestion vessels rack	40-position	1
Exhaust duct (including connector)	ID 75mm，OD 85mm，4m	1
Exhaust duct pipe tie	304 Stainless Steel	1
Teflon turnplate subplate	PTFE	1
Vessel opener		1
User manual		1
Warranty card		1

Optional Accessories

Turnplate	16- position	1
Microwave digestion vessel (inner vessel)	110mL，TFM	16
Microwave digestion vessel (outer vessel)	110mL，PEEK	16
Digestion vessels rack	20- position	1

Optional Instruments

Acid Removal Instrument	20-position (fits 110mL vessels)	1
Acid Removal Instrument	40-position (fits 55mL vessels)	1

General Accessories & Maintenance Supplies

	Part Number	Product Name	Remarks
	**GDN-HW-FG**	Exhaust duct (including connector)	\
	**GDN-HW-FGZ**	Exhaust duct pipe tie	\
	**GDN-HWZP-DB**	Teflon turnplate subplate	\
	**GDN-HWGN-K-55**	Vessel opener	Only applicable for the 55mL digestion inner vessel
	**GDN-HW-AC-16A**	Power cable (16A)	\

40-Position

Standard Accessories

	Part Number	Product Name	Quantity	Description
	**GDN-HWGN-190-55**	Microwave digestion vessel (inner vessel)	40	55mL
	**GDN-HWGW-172-55**	Microwave digestion vessel (outer vessel)	40	55mL
	**GDN-HWZP-40**	Turnplate	1	40-position
	**GDN-HWGJ-40**	Digestion vessels rack	1	40-position, for 55mL digestion vessels only

Optional Accessories

	**GDN-OA-40**	OA-40 Acid Removal Instrument	1	For acid evaporation after digestion 720*620*470 mm (L*W*H), 48kg

16-Position

Standard Accessories

	Part Number	Product Name	Quantity	Description
	**GDN-HWGN-221-110**	Microwave digestion vessel (inner vessel)	16	110mL
	**GDN-HWGW-191-110**	Microwave digestion vessel (outer vessel)	16	110mL
	**GDN-HWZP-16**	Turnplate	1	16-position
	**GDN-HWGJ-20**	Digestion vessels rack	1	20-position, for 110mL digestion vessels only

Optional Accessories

	**GDN-OA-20**	OA-20 Acid Removal Instrument	1	For acid evaporation after digestion 720*620*470 mm (L*W*H), 48kg

Safety and Precautions

Please note, your safety is always our primary concern. Do not digest the following hazardous substances in the microwave digestion system, such as:

- Flammable and Explosive Substances

Explosives (TNT, nitrocellulose, etc.), Propellants (hydrazine, ammonium perchlorate, etc.), Perchlorates, Diols (ethylene glycol, propylene glycol, etc.), Aviation fuels (JP-1, etc.), Pyrophoric chemicals, Phenol ethers (e.g., phenyl cellosolve), Acrolein, etc.

- Two-component Mixtures

Nitric acid and phenol, Nitric acid and triethylamine, Nitric acid and acetone, etc.

- Nitroglycerin, Nitroglycerol or other organic nitro compounds, Glycerol, Animal fats
- Azide Compounds
- Organic Solvents

Acetylene compounds, Alcohols, Alkanes, Ketones, Ethers, Paints, etc.

- Others

In addition to the substances listed above that must not be digested directly in the vessels, special attention should be paid to the following substances which may cause vessel explosion:

① Samples containing organic solvents, e.g., alcoholic beverages, petroleum distillates, chemical plant wastewater or waste liquids.

② Long strip or large lump samples of metals or alloys.

③ Samples with extremely high fat/oil content.

Customer Questionnaire

If you are interested in our instrument, please fill out the information below and send it to our local distributor or email the form directly to sales@rogetscientific.com. We will respond within two working days.

Please tick the box in the brackets【 】

Application (Sample type)

Eg:【√】Agricultural and Food: Analysis of Cadmium in Rice

【 】Environmental Monitoring: _____

【 】Agricultural and Food: _____

【 】Product Quality Research: _____

【 】Scientific Research: _____

【 】Disease Prevention and Control: _____

【 】New Energy: _____

【 】Others _____

The type of acid or oxidant used

【 】HCl

【 】HNO_3

【 】HF

【 】H_2O_2

【 】Others _____

Daily detection sample quantity

【 】0-10 samples

【 】10-50 samples

【 】＞50 samples

Single sample weight

【 】0g-0.5g

【 】0.5g-1g

【 】＞1g

It is recommended to use other digestion methods or carry out in batches if the amount exceeds 1g.

Digestion working step:

Table of Configuration

Please arrange the required system

Instruments

Quantity	Part No.	Product Name	Remarks

Consumables and Accessories

Quantity	Part Number	Product Name	Remarks

Send Offer to

Client Code	
Company	
Contact person	
Address	
Tel.	
E-mail	
Web	

*As the product is updated and iterated, the data sheet may change. Please refer to the latest version of the data sheet. The final interpretation rights of the data sheet belong to Roget Scienfic.