



**Malvern  
Panalytical**  
a spectris company

# Platinum and Labware

Platinum that meets the highest quality standards



# The one-stop shop for platinum and labware used in sample preparation by fusion

Labware is of critical importance in sample preparation by fusion. Malvern Panalytical offers molds and crucibles made of 95% platinum and 5% gold. They are available in a wide range of sizes and thicknesses to help you obtain the best analytical results and are the perfect fit with our instruments. We also offer nickel and zirconium crucibles for peroxide fusion.

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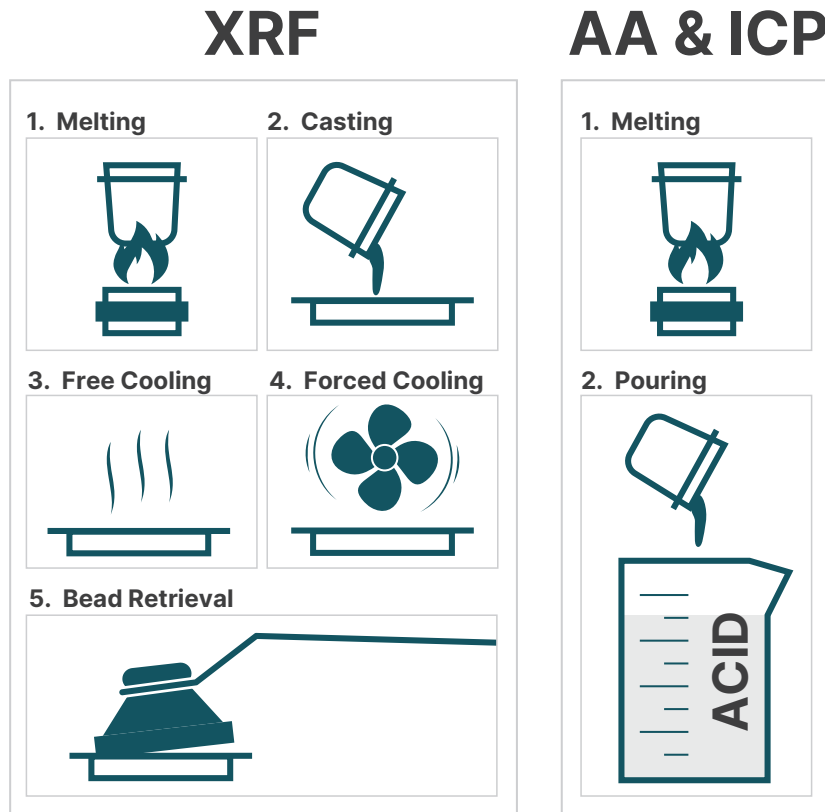
## Why choose our platinumware?

- High quality
  - Available from stock for immediate delivery
  - The 95% platinum and 5% gold accessories prevent sticking
  - Precious metal scrap policy
  - Can be shipped everywhere in the world
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# What is fusion?

Developed in the mid-1950s, fusion is a sample preparation method that consists of dissolving a fully oxidized sample at a high temperature in a suitable solvent (a flux), using a platinum, zirconium, or graphite crucible. The melted mixture is agitated and poured into either a mold, to create a glass disk ready for XRF analysis, or a beaker, to create a solution for ICP or atomic absorption (AA) analysis.



## Why should I use fusion in my lab?

As the chart shows, this universal technique has numerous benefits compared to other sample preparation methods such as pressed pellets or acid digestion.

	Fusion	Pressed pellet
Affected by mineralogy	No	Yes
Affected by particle size	No	Yes
Desirable size of powder (microns)	50-100 (easy)	5-30 (difficult)
Accuracy	≤1%	≤10%
Easy calibration with synthetic standards	Yes	No
Application of matrix correction	Yes	No

## Accessories and instruments that fit well together

Malvern Panalytical fusion instruments were developed to be used with specifically designed platinumware. All our platinum accessories have been tested and engineered to provide:

- The best mixing performance
- Longer lifetime
- Higher success rate in the preparation of glass disks
- Perfect compatibility with our fusion instruments



## Taking care of your platinumware

It is essential to keep the surface of your platinum molds and crucibles flat and smooth to maintain a high quality of analysis. We sell a polishing kit, mold reshapers and a training program for customers who would like to polish their labware on their own.





### Tailored solutions through expertise

Malvern Panalytical experts are the reference for all steps of the fusion process or development of new applications. Their personalised solutions allow customers to properly manage risks, reach a quick ROI, and benefit from a large database of preparation methods for a broad range of samples.







# Catalog of products

Molds	
95% Pt – 5% Au	
P-0230-00	30 mm Claisse regular mold, 0.6 mm thick, 18 g
P-0230-01	30 mm Claisse heavy mold, 1 mm thick, 30 g
MO3057-B	30 mm Claisse optimal mold, 1.2 mm tick, 35 g
P-0232-00	32 mm Claisse regular mold, 0.6 mm thick, 21 g * Available from stock
P-0232-01	32 mm Claisse heavy mold, 1 mm thick, 36 g * Available from stock
MO3001-0A	32 mm Claisse shallow mold, 1 mm thick, 31 g
MO3009-B-0A	32 mm Claisse Eagon 2 mold, 0.8 mm thick, 33 g
MO3010-B-0A	32 mm Claisse heavy Eagon 2 mold, 1.2 mm thick, 49 g
MO3055-B	32 mm Claisse optimal mold, 1.2 mm tick, 40 g
P-0235-00	35 mm Claisse regular mold, 0.72 mm thick, 25 g
P-0235-01	35 mm Claisse heavy mold, 1 mm thick, 48 g
MO3003-0A	35 mm Claisse shallow mold, 1 mm thick, 36 g
MO3053-B	35 mm Claisse optimal mold, 1.2 mm tick, 40 g
P-0240-00	40 mm Claisse regular mold, 0.8 mm thick, 34 g * Available from stock
P-0240-01	40 mm Claisse heavy mold, 1 mm thick, 48 g * Available from stock
MO3002-0A	40 mm Claisse shallow mold, 1 mm thick, 44 g
MO3011-B-0A	40 mm Claisse Eagon 2 mold, 1 mm thick, 53 g
MO3012-B-0A	40 mm Claisse heavy Eagon 2 mold, 1.2 mm thick, 62 g
MO3051-B	40 mm Claisse optimal mold, 1.2 mm tick, 55 g

All weights are nominal ( $\pm 5\%$ )

Crucimolds, Crucibles and Lif	
95% Pt – 5% Au	
P-0130-03	Claisse Optimix™ crucible (with three humps), 30 g * Available from stock
CR3022-B	Claisse oxidation crucible, 35 mL, 35 g
P-0325-00	Claisse Bis!™ crucible, 26 g
P-0330-01	Claisse heavy Bis! crucible, 30 g * Available from stock
P-0120-00	Claisse flat bottom crucible, 20 mL, 24 g
P-0125-00	Claisse flat bottom crucible, 25 mL, 26 g
P-0130-00	Claisse flat bottom crucible, 30 g * Available from stock
CR3010-B-0A	Claisse Eagon 2 flat bottom crucible, 40 g
CR3011-B-0A	Claisse Eagon 2 crucible with dimple, 40 g
CM3000-B	Claisse crucimold, 32 mm bottom diameter
CM3001-B	Claisse crucimold, 40 mm bottom diameter, 40 mL, 90 g
100% Zr	
CR1900-0B	Zirconium crucible, 25 mL
AC3103-B-0B	Zirconium lid for crucible CR1900
P-0430-02	Zirconium crucible, 50 mL
P-0431-02	Zirconium lid for crucible P-0431-02
CR3023-B	Zirconium crucible, 50 mL, usable with FORJ
CR3024-B	Zirconium lid for crucible CR3023-B
100% Ni	
CR1902-0A	Nickel crucible, 25 mL
AC3119-B-0A	Nickel lid for crucible CR1902
P-0450-02	Nickel crucible, 50 mL
P-0451-04	Nickel lid for crucible P-0450-02
CR3025-B	Nickel crucible, 50 mL, usable with FORJ
CR3026-B	Nickel lid for crucible CR3025-B

All weights are nominal ( $\pm 5\%$ )

The heavy molds are highly recommended since they are well known for their durability and because they can be polished several times.

Accessories	
PRK-RS030	Flat bottom crucible reshaper compatible with P-0130-00
PRK-RS035	32 mm shallow mold reshaper, compatible with MO3001
PRK-RS036	40 mm shallow mold reshaper, compatible with MO3002
PRK-RS037	35 mm shallow mold reshaper, compatible with MO3003
PRK-PK001	Claisse mold polishing kit (120 V)
PRK-PK002	Claisse mold polishing kit (240 V)
P-0600-20	Polishing recharge 1
P-0600-30	Polishing recharge 2
PRK-VM001	Claisse VortexMixer™ (110 V)
PRK-VM002	Claisse VortexMixer (220 V)



## About Malvern Panalytical

We draw on the power of our analytical instruments and services to make the invisible visible and the impossible possible.

Through the chemical, physical and structural analysis of materials, our high precision analytical systems and top-notch services support our customers in creating a better world. We help them improve everything from the energies that power us and the materials we build with, to the medicines that cure us and the foods we enjoy.

We partner with many of the world's biggest companies, universities and research organizations. They value us not only for the power of our solutions, but also for the depth of our expertise, collaboration and integrity.

We are committed to Net Zero in our own operations by 2030 and in our total value chain by 2040. This is woven into the fabric of our business, and we help our employees and customers think about their part in creating a healthier, cleaner, and more productive world.

With over 2300 employees, we serve the world, and we are part of Spectris plc, the world-leading precision measurement group.

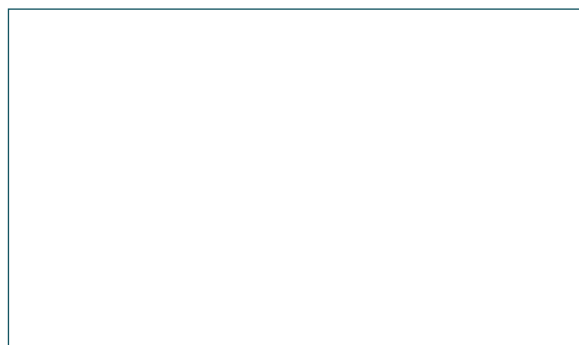
**Malvern Panalytical. We're BIG on small™**

## Service & Support

Malvern Panalytical provides the global training, service and support you need to continuously drive your analytical processes at the highest level. We help you increase the return on your investment with us, and ensure that as your laboratory and analytical needs grow, we are there to support you.

Our worldwide team of specialists adds value to your business processes by ensuring applications expertise, rapid response and maximum instrument uptime.

- Local and remote support
- Full and flexible range of support agreements
- Compliance and validation support
- Onsite or classroom-based training courses
- e-Learning training courses and web seminars
- Sample and application consultancy



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