

185

R

TR

ZA

A A

Ø

Ø

No. 1

Emmed

[XI

AN AN

et

I

EN

A

M

2

3

Ø

TX

OF

7

E.B.

AN AN

P

<u>}</u>

S

S.

State of the second sec

R. Martin

A CAR

M

(n)

IN N

X IX

WS

Ø

E is

Y

Ø

A

R

Th

N

(III TOL

(IN TO

R

F.

iXI

TO

~

EN TON

K

AT I

Ø

(

6

e f

THE PART

E

X

No was

T

an

ALL AND

6

<

F.

E.

And the second s

D

Capsules for elemental analysis

Ordering Information

We are happy to accept orders by any of the following methods:

Phone: +44 (0)1837 54446

Fax: +44 (0)1837 54544

E-mail: info@microanalysis.co.uk

Mail: Elemental Microanalysis Ltd 1 Hameldown Road Okehampton Business Park Okehampton Devon EX20 1UB United Kingdom

We can invoice you in Sterling, Euro or US Dollar and accept Visa, Mastercard and American Express, account facilities are readily available for regular customers, please enquire.

Shipping worldwide

We regularly ship directly to customers in all parts of the world. Local dealers are available in many countries: contact us for details.



www.microanalysis.co.uk

Available locally from:

Contents

- 3 Introduction
- 6 Tin Capsules
- 8 Silver Capsules
- 9 Aluminium Capsules Nickel and Copper Capsules
- 10 Pressed Weighing Pans
- 12 Weighing Boats
- 13 Foil Discs
- 14 Foil Squares and other sample encapsulation
- 15 Tools and Accessories

Back cover: Faxback form for literature request



Introduction

Elemental Micro**analysis**

About the Company

Elemental Microanalysis grew from small beginnings almost 35 years ago as a micro-analytical laboratory to its current form as a leading manufacturer and supplier of consumables, supplies and other products for Elemental Analysers. We operate from our purpose-built factory and laboratory complex in Devon UK.

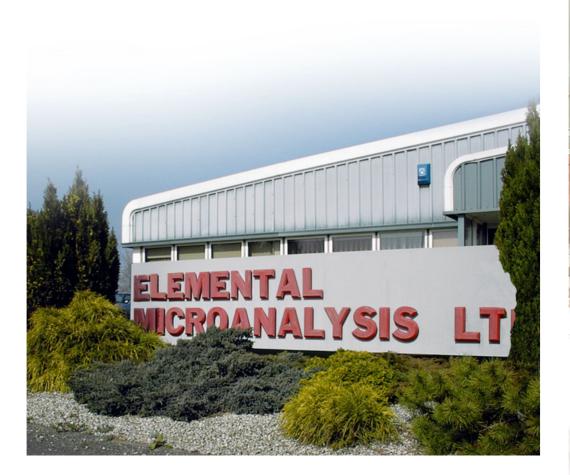
You learn a lot in 35 years - a lot about your products - how to make them and how to use them, a lot about your customers and their needs. We have been developing, refining and using products for elemental analysis since 1976 and have a unique in-depth knowledge of instruments from all manufacturers.

These days we offer the world's largest range of products for elemental analysers sending our products to customers across the globe.

We take great care with the quality of our products. The vast majority are manufactured in-house by our trained technicians within our ISO 9001:2008 accredited quality system. But we don't just make the products - we use them every day in our own analytical laboratory giving us constant feedback on their performance. We do not compromise on quality and don't expect you to either. Our total satisfaction guarantee backs up our commitment to our product quality.

'Price is what you pay, value is what you get'. As the leading independent supplier of elemental analysis consumables you can achieve substantial savings in comparison to the prices charged by the original supplier of your instrument. But we know that you need more from a supplier than simply low prices. You need to buy with the confidence that your analysis will not be compromised by poor quality consumables and the knowledge that your supplier has all the resources to provide the full range of support that you expect.

We will always treat our customers with honesty and integrity. If we do make a mistake we don't try to hide it - we recognise it and put it right. We won't sell you short measure and we won't mislead you in any way. Our business is built on long-term relationships as our customers will testify - many have been with us for more than 25 years.





3



Introduction



Guaranteed quality

Our quality system is certified to BS EN ISO 9001:2008 by LRQA under certificate no 956566 and is regularly audited by independent specialists. Our confidence in our products allows us to offer you a total satisfaction guarantee: if our product does not perform at least as well as the product brand you usually use you can return it for a full refund.





Try our products - free of charge!

Try before you buy - we have sample packs available for most elemental analysers on the market. Just let us know the instrument you have and we will send you a trial quantity of 3-4 different consumables to try - free and with no obligation. Offer limited to one per customer.

Sales service

Our sales staff will ensure that your order is despatched promptly and correctly. They can tell you about our stock levels, prices, shipping arrangements, or answer any other queries you may have.

Most orders are despatched within 24 hours of receipt. Rush orders receive special attention and are processed immediately. If you have an urgent problem or require priority despatch, please let us know.

Technical service

In this catalogue we have tried to provide the most accurate and complete information possible about our ever-expanding range. We realise, however, that you may require additional technical information. For this reason we have technical specialists on hand to answer your questions and advise you on selecting the products best suited to your needs. We can also supply samples, and even develop new products for your particular application.

Design changes

We are constantly working on improving our products and these improvements may mean that some products differ from the descriptions in this catalogue. Our technical staff are happy to discuss any improvements made, and the resultant benefits.

Terms and conditions of sale

The acceptance of any order is on the understanding that the purchaser agrees to the following Terms and Conditions of Sale:

Prices and orders

Prices can be confirmed by contacting our sales team. Both quoted and printed prices may be subject to alteration without notice. Order numbers are not required if payment can be made against invoice.

Quotations and invoices

Quotations are subject to confirmation on receipt of order. We reserve the right to amend any accidental errors or omissions.

Delivery

Although every effort will be made to honour delivery dates, no liability can be accepted if delays or non-delivery occurs.

Amendments or cancellations

Once an order is placed we consider it firm and only open to cancellation or amendment with our agreement.

Responsibility

Our responsibility is limited to the supply of goods of the type and quantity ordered and all consequential or resulting liability is expressly excluded.

Product origins

The vast majority of products are manufactured and packed in the UK by Elemental Microanalysis Ltd. The use of instrument names, instrument manufacturer names and part numbers does not imply that the products are of instrument manufacturer's origin.

Health, Safety and the Environment

We care about the effects our products may have on the health of our customers. Up to date health and safety information on relevant products (MSDS) is attached to the delivery note of every order.

Users are warned to examine and test goods and to exercise special care in cases where the use or storage of goods involves danger to people or property.

Particular care is needed with glass equipment and chemicals. We cannot accept liability for and injury or damage caused in any circumstances.

Our location, on the edge of the beautiful Dartmoor National Park, reminds us every day of our environmental responsibility. We are committed to the protection of the natural environment and ensure that any impact of our manufacturing activities is minimised.

We do not discharge hazardous effluents or atmospheric emissions in our manufacturing processes. We recycle waste metals, heat and most chemicals. Any materials that cannot be recycled are disposed of in a responsible manner. We operate a 'return to manufacturer' facility for safe disposal of used materials that we have supplied.

Introduction

Other literature available from Elemental Microanalysis

In addition to this catalogue a range of other catalogues and product sheets are available:

Catalogues

We publish catalogues covering the following areas of elemental analysis:

- Nitrogen/Protein
- Carbon/Sulphur
- Inorganic
- Organic Elemental (CHN/O/S)
- IRMS Supplement
- Trace TOC
- Macro



Product sheets

Product sheets are available for every instrument we support. They cover all the common day-to-day items required to run your instrument.



Contract analysis service

We also offer a contract analysis service for a variety of (mainly) organic compounds. Full details are available in our **Microanalytical Services** brochure.



All literature is available using the 'faxback' form on the rear cover of this catalogue or can be downloaded from our website.



Elemental

Micro**analysis**

Introduction

5



Capsules

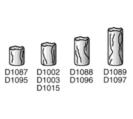
in standard and ultra-light weights.

Pressed Tin Capsules for Solid Samples

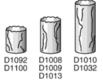
Elemental Microanalysis pressed tin capsules for solid samples are available

Actual size



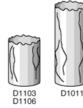














| Standard weight | | | | | | | | | | | | | |
|------------------|-------------|-------------|-------------|------|--------|--|--|--|--|--|--|--|--|
| For routine use. | | | | | | | | | | | | | |
| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no | | | | | | | | |
| 2 | 4.5 | 14 | 8 | 100 | D1083 | | | | | | | | |
| 3.2 | 4 | 32 | 8 | 100 | D1001 | | | | | | | | |
| 3.2 | 4 | 32 | 8 | 500 | D1000 | | | | | | | | |
| 3.2 | 5.25 | 42 | 12 | 100 | D1109 | | | | | | | | |
| 3.2 | 6.5 | 52 | 17 | 100 | D1086 | | | | | | | | |
| 3.5 | 3.75 | 36 | 8 | 100 | D1087 | | | | | | | | |
| 3.5 | 5 | 48 | 12 | 500 | D1002 | | | | | | | | |
| 3.5 | 5 | 48 | 12 | 100 | D1003 | | | | | | | | |
| 3.5 | 6.25 | 60 | 17 | 100 | D1088 | | | | | | | | |
| 3.5 | 8.75 | 84 | 30 | 100 | D1089 | | | | | | | | |
| 4 | 4.75 | 60 | 12 | 100 | D1090 | | | | | | | | |
| 4 | 6 | 75 | 17 | 100 | D1007 | | | | | | | | |
| 4 | 6 | 75 | 17 | 500 | D1006 | | | | | | | | |
| 4 | 8.5 | 107 | 30 | 100 | D1091 | | | | | | | | |
| 5 | 5.5 | 108 | 17 | 100 | D1092 | | | | | | | | |
| 5 | 8 | 157 | 30 | 100 | D1009 | | | | | | | | |
| 5 | 8 | 157 | 32 | 250 | D1008 | | | | | | | | |
| 5 | 12.5 | 245 | 64 | 200 | D1010 | | | | | | | | |
| 6 | 7.5 | 212 | 30 | 100 | D1093 | | | | | | | | |
| 6 | 12 | 339 | 62 | 200 | D1012 | | | | | | | | |
| 6 | 14 | 396 | 82 | 200 | D1017 | | | | | | | | |
| 7 | 7 | 269 | 30 | 100 | D5047 | | | | | | | | |
| 7 | 11.5 | 443 | 62 | 100 | D1102 | | | | | | | | |
| 8 | 11 | 553 | 62 | 100 | D1103 | | | | | | | | |
| 8 | 13.5 | 679 | 82 | 200 | D1018 | | | | | | | | |
| 8 | 20 | 1005 | 160 | 100 | D1011 | | | | | | | | |
| 9 | 10.5 | 668 | 62 | 100 | D1104 | | | | | | | | |

Ultra-light weight

A range of ultra-light weight tin capsules weighing 40% less than the standard range. These lower weight capsules produce less swarf build-up in combustion tubes, have lower blank values and provide more available oxygen for effective combustion of samples.

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 2 | 4.5 | 14 | 5 | 100 | D1084 |
| 3.2 | 4 | 32 | 5 | 100 | D1014 |
| 3.2 | 5.25 | 42 | 8 | 100 | D1108 |
| 3.2 | 6.5 | 52 | 11 | 100 | D1094 |
| 3.5 | 3.75 | 36 | 5 | 100 | D1095 |
| 3.5 | 5 | 48 | 8 | 100 | D1015 |
| 3.5 | 6.25 | 60 | 11 | 100 | D1096 |
| 3.5 | 8.75 | 84 | 19 | 100 | D1097 |
| 4 | 4.75 | 60 | 11 | 100 | D1098 |
| 4 | 6 | 75 | 11 | 100 | D1016 |
| 4 | 8.5 | 107 | 19 | 100 | D1099 |
| 5 | 5.5 | 108 | 11 | 100 | D1100 |
| 5 | 8 | 157 | 19 | 100 | D1013 |
| 5 | 12.5 | 245 | 39 | 100 | D1032 |
| 6 | 7.5 | 212 | 19 | 100 | D1101 |
| 6 | 12 | 339 | 39 | 100 | D1033 |
| 7 | 7 | 269 | 19 | 100 | D5208 |
| 7 | 11.5 | 443 | 39 | 100 | D1105 |
| 8 | 11 | 553 | 39 | 100 | D1106 |
| 9 | 10.5 | 668 | 39 | 100 | D1107 |
| 10 | 10 | 785 | 39 | 100 | D5216 |
| | | | | | |

Elemental Microanalysis pressed capsules for solid samples are available in standard and ultra-light weights. They are manufactured to exacting standards ensuring consistently low blank values and uniform weight.

They can be used without any cleaning pre-treatment, but for critical samples solvent cleaning is recommended. They should not be ultrasonically cleaned as damage may result.

We can manufacture capsules in sizes and materials other than those listed below. We also offer discounts for larger quantities. Please enquire for details.



CHNOS analysis

Flat Bottom Smooth Tin Capsules

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|----------------|
| 1.06 | 5.5 | 5 | 8 | 50 | D4107 |
| 2 | 3.5 | 11 | 19 | 100 | D4040 |
| 2 | 4 | 13 | 21 | 100 | D4041 |
| 2 | 4.5 | 14 | 23 | 100 | D4019 |
| 2 | 5 | 16 | 25 | 100 | D4042 |
| 2 | 5.5 | 18 | 27 | 100 | D4000 |
| 3 | 3.5 | 24 | 31 | 100 | D4025 |
| 3 | 4 | 28 | 34 | 100 | D4043 |
| 3 | 4.5 | 32 | 38 | 100 | D4044 |
| 3 | 5 | 35 | 41 | 100 | D4045 |
| 3 | 5.5 | 39 | 45 | 100 | D4046 |
| 3 | 6 | 42 | 48 | 100 | D4001 |
| 3 | 6 | 42 | 48 | 250 | D4131 |
| 3 | 7 | 49 | 54 | 100 | D4020 |
| 3 | 8 | 57 | 65 | 100 | D4021 |
| 3.5 | 4 | 38 | 42 | 100 | D4032 |
| 3.5 | 4.5 | 43 | 46 | 100 | D4047 |
| 3.5 | 5 | 48 | 51 | 100 | D4048 |
| 3.5 | 5.5 | 53 | 5.5 | 100 | D4033 |
| 3.5 | 6 | 58 | 59 | 100 | D4000 |
| 3.5 | 7 | 67 | 66 | 100 | D4034 |
| 3.5 | 8 | 77 | 75 | 100 | D4050 |
| 3.5 | 9 | 87 | 84 | 100 | D4035 |
| 3.5 | 9 | 87 | 84 | 250 | D4033 D4132 |
| 4.75 | 11 | 195 | 155 | 250 | D4132 D4121 |
| 4.75 | 5 | 98 | 76 | 100 | D4121 D4051 |
| 5 | 5.5 | 108 | 82 | 100 | D4051 D4052 |
| 5 | 6 | 118 | 88 | 100 | D4052 D4054 |
| 5 | 7 | | | | |
| | | 137 | 98 | 100 | D4036 |
| 5 | 8 | 157 | 111 | 100 | D4057 |
| 5 | 9 | 177 | 122 | 100 | D4059 |
| 5 | 10 | 196 | 134 | 100 | D4037 |
| 5 | 12 | 236 | 157 | 100 | D4038 |
| 5 | 18 | 353 | 222 | 100 | D4039 |
| 6 | 6 | 170 | 153 | 100 | D4084 |
| 6 | 7 | 198 | 172 | 100 | D4085 |
| 6 | 8 | 226 | 191 | 100 | D4086 |
| 6 | 9 | 254 | 210 | 100 | D4087 |
| 6 | 10 | 283 | 229 | 100 | D4088 |
| 6 | 12 | 339 | 266 | 100 | D4089 |
| 6 | 18 | 509 | 290 | 100 | D4090 |
| 6.75 | 14 | 1039 | 305 | 100 | D4120 |
| 8 | 8 | 402 | 219 | 100 | D4091 |
| 8 | 9 | 452 | 237 | 100 | D4092 |
| 8 | 10 | 502 | 255 | 100 | D4093 |
| 8 | 12 | 603 | 292 | 100 | D4094 |
| 8 | 18 | 904 | 401 | 100 | D4095 |
| 8 | 20 | 1005 | 438 | 100 | D4096 |
| | | | | | |

Round Bottom Smooth Tin Capsules

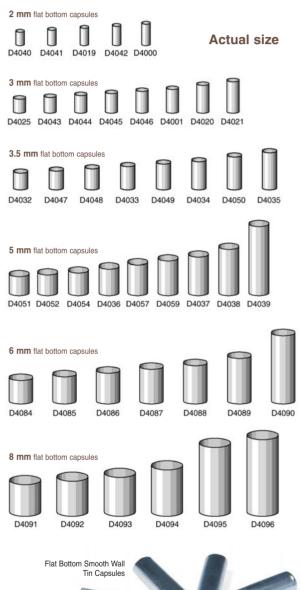
| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 5 | 5 | 82 | 96 | 100 | D4010 |
| 5 | 8 | 141 | 130 | 100 | D4058 |
| 5 | 10 | 180 | 153 | 100 | D4061 |
| 5 | 12 | 219 | 176 | 100 | D4062 |
| 5 | 18 | 337 | 245 | 100 | D4003 |
| 6 | 6 | 141 | 126 | 100 | D4008 |
| 6 | 8 | 198 | 153 | 100 | D4066 |
| 6 | 10 | 254 | 181 | 100 | D4070 |
| 6 | 12 | 311 | 208 | 100 | D4072 |
| 6 | 18 | 481 | 290 | 100 | D4007 |
| 6 | 18 | 481 | 290 | 1000 | D4015 |
| 8 | 8 | 335 | 224 | 100 | D4011 |
| 8 | 10 | 436 | 260 | 100 | D4078 |
| 8 | 12 | 536 | 297 | 100 | D4080 |
| 8 | 18 | 838 | 406 | 100 | D4082 |
| 8 | 20 | 938 | 443 | 100 | D4009 |

Elemental Microanalysis smooth wall capsules for liquid samples are extruded to exacting standards to ensure consistently low blank values, high quality fabrication and low weight. Smooth wall capsules can be used without any cleaning pre-treatment, but we recommend solvent cleaning for critical work.

Capsules

The capsules can be sealed using a proprietory sealing tool or mole grips, available from our microanalytical sundries section.

We can manufacture capsules in sizes and materials other than those listed here. Please enquire for details.



Round Bottom Smooth Wall Tin Capsules D4009



0 D2083

D2087

D5069

Actual size

D2000 D2001

D2085

 \sim

D2086

57

Capsules

CHNOS analysis

Pressed Silver Capsules for Solids

Silver capsules may become slightly oxidised or tarnished due to oxygen and contaminants in the air. This can easily be removed by heating to 375° C in air for one hour prior to use. They should be stored long term under an inert gas. For routine use.

Standard weight

| | Diameter (mm) |
|--|---------------|
| | 2 |
| 2087 D2002 D2088 D2089 | 2 |
| D2003 | 3.2 |
| | 3.2 |
| | 3.2 |
| D2090 D2006 D2091 | 3.2 |
| D2007 | 3.5 |
| 1. (1 | 3.5 |
| | 3.5 |
| | 3.5 |
| D2092 D2008 D2010 | 3.5 |
| D2092 D2008 D2010 D2009 | 4 |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 4 |
| | 4 |
| | 4 |
| | 5 |
| D2093 D2012 | 5 |
| | 5 |
| mill mill | 5 |
| | 6 |
| | 6 7 |
| D5069 D2102 D2103 | 7 |
| | 8 |
| | 9 |
| | 9 10 |
| | 5 |
| D2104 D5076 | |
| 52.0. 00070 | Ultra-light v |
| | 0.0 |

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 2 | 4.5 | 14 | 15 | 100 | D2083 |
| 2 | 4.5 | 14 | 15 | 100 | D2183 |
| 3.2 | 4 | 32 | 15 | 100 | D2001 |
| 3.2 | 4 | 32 | 15 | 500 | D2000 |
| 3.2 | 5.25 | 42 | 22 | 100 | D2085 |
| 3.2 | 6.5 | 52 | 31 | 100 | D2086 |
| 3.5 | 3.75 | 36 | 15 | 100 | D2087 |
| 3.5 | 5 | 48 | 22 | 100 | D2003 |
| 3.5 | 5 | 48 | 22 | 500 | D2002 |
| 3.5 | 6.25 | 60 | 31 | 100 | D2088 |
| 3.5 | 8.75 | 84 | 54 | 100 | D2089 |
| 4 | 4.75 | 60 | 22 | 100 | D2090 |
| 4 | 6 | 75 | 31 | 100 | D2007 |
| 4 | 6 | 75 | 31 | 500 | D2006 |
| 4 | 8.5 | 107 | 54 | 100 | D2091 |
| 5 | 5.5 | 108 | 31 | 100 | D2092 |
| 5 | 8 | 157 | 54 | 100 | D2009 |
| 5 | 8 | 157 | 54 | 250 | D2008 |
| 5 | 12.5 | 245 | 110 | 200 | D2010 |
| 6 | 7.5 | 212 | 54 | 100 | D2093 |
| 6 | 12 | 339 | 110 | 200 | D2012 |
| 7 | 7 | 269 | 54 | 100 | D5069 |
| 7 | 11.5 | 443 | 110 | 100 | D2102 |
| 8 | 11 | 553 | 110 | 100 | D2103 |
| 9 | 10.5 | 668 | 110 | 100 | D2104 |
| 10 | 10 | 785 | 110 | 100 | D5076 |
| 5 | 9 | 160 | 67 | 250 | D4105 |
| Ultra-ligh | t weight | | | | |
| 3.2 | 4 | 32 | 10 | 500 | D2300 |
| 3.2 | 4 | 32 | 10 | 100 | D2301 |
| | | | | | |

Round Bottom Smooth Silver Capsules for Liquids

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no | |
|---------------|-------------|-------------|-------------|------|--------|--|
| 2 | 5 | 15 | 34 | 250 | D4103 | |
| 3.5 | 4 | 33 | 90 | 250 | D4104 | |
| 3.5 | 5.5 | 47 | 113 | 250 | D4102 | |
| 3.5 | 9 | 81 | 137 | 100 | D4101 | |









CHNOS analysis

Pressed Aluminium Capsules for Solids

Capsules

Aluminium capsules can be used in place of tin for certain applications. While solvent rinsing may remove surface traces, aluminium capsules can be pre-combusted at 550°C to remove contaminants, so are particularly recommended for low level C and N analysis.

| Diameter (mr | n) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|--------------|----|-------------|-------------|-------------|------|--------|
| 2 | | 4.5 | 14 | 4 | 100 | D3083 |
| 3.2 | | 4 | 32 | 4 | 500 | D3000 |
| 3.2 | | 5.25 | 42 | 6 | 100 | D3085 |
| 3.2 | | 6.5 | 52 | 8 | 100 | D3086 |
| 3.5 | | 3.75 | 36 | 4 | 100 | D3087 |
| 3.5 | | 5 | 48 | 6 | 500 | D3001 |
| 3.5 | | 6.25 | 60 | 8 | 100 | D3088 |
| 3.5 | | 8.75 | 84 | 14 | 100 | D3089 |
| 4 | | 4.75 | 60 | 6 | 100 | D3090 |
| 4 | | 6 | 75 | 8 | 500 | D3003 |
| 4 | | 8.5 | 107 | 14 | 100 | D3091 |
| 5 | | 5.5 | 108 | 8 | 100 | D3092 |
| 5 | | 8 | 157 | 14 | 250 | D3004 |
| 5 | | 12.5 | 245 | 27 | 200 | D3005 |
| 6 | | 7.5 | 212 | 14 | 100 | D3093 |
| 6 | | 12 | 339 | 27 | 200 | D3006 |
| 7 | | 7 | 269 | 14 | 100 | D5089 |
| 7 | | 11.5 | 443 | 27 | 100 | D3102 |
| 8 | | 11 | 553 | 27 | 100 | D3103 |
| 9 | | 10.5 | 668 | 27 | 100 | D3104 |
| 10 | | 10 | 785 | 28 | 100 | D5097 |



| Flat | Bottom | Smooth | Aluminium | Capsules |
|------|--------|--------|-----------|-------------|
| | | | | for Liquids |

| Diameter (mr | n) | Height (mm) | Volume (µl) | Weight (mg) | Pack | Cat no | |
|--------------|----|-------------|-------------|-------------|------|--------|--|
| 3 | | 7 | 46 | 32 | 100 | D3010 | |
| 3.2 | | 7 | 52 | 40 | 250 | D4111 | |
| 3.5 | | 9 | 81 | 53 | 250 | D4110 | |

| | | Presse | d Nickel | Ca | bsules |
|---------------|-------------|------------------|----------------|-------------------|-------------------------|
| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
| 4 | 6 | 75 | 24 | 250 | D3507 |
| 5 | 8 | 157 | 40 | 250 | D3503 |
| 5 | 8 | 157 | 40 | 250 | D3502 |
| 5 | 12.5 | 245 | 85 | 100 | D3500 |
| 4 5 5 | 6 8 8 | 75 157 157 | 24 40 40 | 250 250 250 | D3507 D3503 D3502 |

Round Bottom Smooth Nickel Capsules

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 5 | 11 | 200 | 265 | 100 | D3506 |
| 6.5 | 10 | 375 | 310 | 100 | D3508 |

Round Bottom Smooth Copper Capsules

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 6 | 18 | 495 | 197 | 100 | D4100 |





















Pressed Weighing Pans for solid samples

CHNOS analysis

Actual size









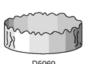




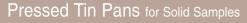
D5054 D5215







D5060 D5221



Elemental Microanalysis pressed pans for solid samples are available in two weights - solid and ultra-light.

They can be used without any cleaning pre-treatment, but for critical samples solvent cleaning is recommended.

They should not be ultrasonically cleaned as damage may result.

Standard weight

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 4 | 3.5 | 44 | 8 | 100 | D5040 |
| 5 | 3 | 59 | 8 | 100 | D5041 |
| 5 | 4.25 | 83 | 12 | 100 | D5042 |
| 6 | 2.5 | 71 | 8 | 100 | D5003 |
| 6 | 3.75 | 106 | 12 | 100 | D5043 |
| 6 | 5 | 141 | 17 | 100 | D5044 |
| 7 | 3.25 | 125 | 12 | 100 | D5045 |
| 7 | 4.5 | 173 | 17 | 100 | D5046 |
| 8 | 2.75 | 138 | 12 | 100 | D5048 |
| 8 | 4 | 201 | 17 | 100 | D5049 |
| 8 | 6.5 | 327 | 30 | 100 | D5050 |
| 9 | 3.5 | 223 | 17 | 100 | D5051 |
| 9 | 6 | 382 | 30 | 100 | D5052 |
| 10 | 3 | 236 | 17 | 100 | D5053 |
| 10 | 5.5 | 432 | 30 | 100 | D5054 |
| 12.5 | 4.25 | 522 | 30 | 100 | D5056 |
| 12.5 | 8.75 | 1074 | 62 | 100 | D5057 |
| 15 | 7.5 | 1325 | 62 | 100 | D5059 |
| 20 | 5 | 1571 | 62 | 100 | D5060 |

Ultra-light weight

Weigh approximately 40% less than the standard range.

| Diameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|---------------|-------------|-------------|-------------|------|--------|
| 4 | 3.5 | 44 | 5 | 100 | D5200 |
| 5 | 3 | 59 | 5 | 100 | D5201 |
| 5 | 4.25 | 83 | 8 | 100 | D5202 |
| 6 | 2.5 | 71 | 5 | 100 | D5203 |
| 6 | 3.75 | 106 | 8 | 100 | D5204 |
| 6 | 5 | 141 | 11 | 100 | D5205 |
| 7 | 3.25 | 125 | 8 | 100 | D5206 |
| 7 | 4.5 | 173 | 11 | 100 | D5207 |
| 8 | 2.75 | 138 | 8 | 100 | D5209 |
| 8 | 4 | 201 | 11 | 100 | D5210 |
| 8 | 6.5 | 327 | 19 | 100 | D5211 |
| 9 | 3.5 | 223 | 11 | 100 | D5212 |
| 9 | 6 | 382 | 19 | 100 | D5213 |
| 10 | 3 | 236 | 11 | 100 | D5214 |
| 10 | 5.5 | 432 | 19 | 100 | D5215 |
| 12.5 | 4.25 | 522 | 19 | 100 | D5217 |
| 12.5 | 8.75 | 1074 | 39 | 100 | D5218 |
| 15 | 7.5 | 1325 | 39 | 100 | D5220 |
| 20 | 5 | 1571 | 39 | 100 | D5221 |
| | | | | | |



Pressed Weighing Pans for solid samples

4

5

5

6

6

6

7

7

8

8

8

9

9

10

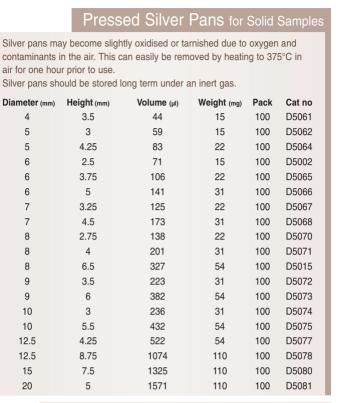
10

15

20



\$7



Actual size

M

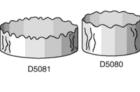
D5061 D5062 D5064 MX 1 1 NR D5002 D5065 D5066 R 2 74 D5067 D5068













D5085

D5086



D5000











Elemental Microanalysis pressed pans for solid samples are manufactured to exacting standards to ensure consistently low blank values, high quality fabrication and uniform weight. They are available in aluminium, silver and tin.

They can be used without any cleaning pre-treatment, but for critical samples solvent cleaning is recommended. They should not be ultrasonically cleaned as damage may result.

We can manufacture pans in sizes and materials other than those listed below. We also offer discounts for larger quantities. Please enquire for details.

Pressed Aluminium Pan D8601

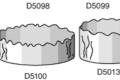
(Not actual size)

Pressed Aluminium Pans for Solid Samples

Aluminium Pans for Moisture Determination

| Diameter (mm) | Height (mm) | Weight (g) | Pack | Cat no | |
|---------------|-------------|------------|------|--------|--|
| 100 | 7 | 2.51 | 80 | D5017 | |
| 100 | 7 | 2.51 | 80 | D5018 | |





D5095





Weighing Boats for liquid and solid samples

CHNOS analysis







Nickel Boats D5006





| | | | g Douit | | | | |
|----|-----------|------------|-------------|----------------|-------------|------------|---------------|
| Le | ngth (mm) | Width (mm) | Height (mm) | Thickness (mm) | Volume (µl) | Weight (mg |) Pack Cat no |
| | 8 | 8 | 15 | 0.02 | 960 | 100 | 250 D5032 |
| | 9 | 4 | 2.5 | 0.1 | 90 | 56 | 100 D5009 |
| | 9 | 10 | 20 | 0.2 | 1800 | 175 | 120 D5033 |
| | 12 | 4 | 2.7 | 0.1 | 129.6 | 64 | 100 D5113 |
| | 12 | 4 | 4 | 0.0125 | 192 | 21 | 100 D5022 |
| | 12 | 4 | 4 | 0.0125 | 192 | 21 | 1000 D5130 |
| | 12 | 4 | 4 | 0.02 | 192 | 36 | 1000 D5140 |
| | 12 | 6 | 6 | 0.0125 | 432 | 38 | 100 D5023 |
| | 12 | 6 | 6 | 0.2 | 432 | 60 | 500 D5131 |

Silver Weighing Boats

Tin Weighing Boats

| Le | ngth (mm) | Width (mm) | Height (mm) | Thickness (mm) | Volume (µI) | Weight (mg |) Pack | Cat no |
|----|-----------|------------|-------------|----------------|-------------|------------|--------|--------|
| | 15 | 8 | 8 | 0.15 | 960 | 147 | 70 | D5034 |
| | 20 | 10 | 9 | 0.15 | 1800 | 190 | 42 | D5035 |
| | 12 | 4 | 2.7 | 0.015 | 129.6 | 15 | 100 | D5112 |
| | 12 | 4 | 4 | 0.015 | 192 | 36 | 100 | D5024 |
| | 12 | 6 | 6 | 0.015 | 432 | 55 | 100 | D5026 |
| | 9 + tab | 4 | 2.5 | 0.015 | 90 | 19 | 100 | D5008 |

Aluminium Weighing Boats

| Le | ngth (mm) | Width (mn | n) Height (mm) | Thickness (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|----|-----------|-----------|----------------|----------------|-------------|-------------|------|--------|
| | 8 | 8 | 15 | 0.015 | 960 | 30 | 250 | D5036 |
| | 9 + tab | 4 | 2.5 | 0.1 | 90 | 18 | 100 | D5007 |
| | 9 | 10 | 20 | 0.015 | 1800 | 48 | 120 | D5037 |
| | 12 | 4 | 2.7 | 0.1 | 129.6 | 25 | 100 | D5010 |
| | 12 | 4 | 2.7 | 0.1 | 129.6 | 25 | 500 | D5016 |
| | 12 | 4 | 4 | 0.015 | 192 | 10 | 100 | D5030 |
| | 12 | 4 | 4 | 0.015 | 192 | 10 | 1000 | D5132 |
| | 12 | 6 | 6 | 0.015 | 432 | 16 | 100 | D5031 |
| | 12 | 6 | 6 | 0.015 | 432 | 16 | 500 | D5133 |
| | 24 | 7 | 7 | 0.1 | 1176 | 180 | 100 | D5142 |

Nickel Weighing Boats

| Length (mm) | Width (r | mm) Height (mm) | Thickness (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|-------------|----------|-----------------|----------------|-------------|-------------|------|--------|
| 9 + tab | 4 | 2.5 | 0.15 | 90 | 81 | 100 | D5006 |
| 12 | 4 | 2.7 | 0.15 | 129.6 | 122 | 100 | D5111 |
| 12 | 4 | 4 | 0.13 | 192 | 27 | 100 | D5122 |
| 12 | 6 | 6 | 0.13 | 432 | 44 | 100 | D5123 |

Copper Weighing Boats

| Length (mm) | Width (mm) | Height (mm) | Thickness (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|-------------|------------|-------------|----------------|-------------|-------------|------|--------|
| 9 | 4 | 2.7 | 0.1 | 97.2 | 83 | 100 | D5020 |
| 9 + tab | 4 | 2.5 | 0.1 | 90 | 109 | 100 | D5114 |

Platinum Weighing Boats

| Length (mm) | Width (m | nm) Height (mm) | Thickness (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
|-------------|----------|-----------------|----------------|-------------|-------------|------|--------|
| 9 + tab | 4 | 2.5 | 0.1 | 90 | 75 | 1 | D5004 |
| 9 + tab | 4 | 2.5 | 0.05 | 90 | 75 | 1 | D5005 |
| 12 | 4 | 2.7 | 0.05 | 129.6 | 99 | 1 | D5115 |
| 12 | 4 | 2.7 | 0.1 | 129.6 | 198 | 1 | D5110 |

Actual size



15

D5022



D5113







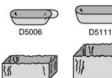




D5010 D5016











D5122









Foil Discs for sample encapsulation

CHNOS analysis

Elemental Micro**analysis**

Elemental Microanalysis metal foil discs are ideal for the encapsulation of sticky, fibrous or other samples which are difficult to handle using conventional pressed capsules. A small dab or a few fibres on a disc is easily encapsulated by folding the foil around the sample. With a little practice even glass fibre filters can be rolled up in foil discs to form neat cylinders which fit the instrument carousel.

Foil discs available in other materials.

(all outlines actual size)





D1063 D1073 D2063 D3063





Foil Discs for Glass Fibre Filters, Fibrous and Sticky Samples

Standard weight tin foil discs

| Manufactured fro | om hiah | purity tin | Suitable | for | routine | use |
|------------------|---------|-------------|-------------|-----|---------|------|
| Manufactureu III | лп шуп | i punty tin | i. Suitable | 101 | Toutine | use. |

| Diameter (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|---------------|----------------|-------------|------|--------|
| 11 | 0.0125 | 8 | 100 | D1060 |
| 13.5 | 0.0125 | 12 | 100 | D1061 |
| 16 | 0.0125 | 17 | 100 | D1063 |
| 21 | 0.0125 | 30 | 100 | D1064 |
| 30 | 0.0125 | 62 | 100 | D1066 |
| 34 | 0.0125 | 82 | 100 | D1059 |
| 35 | 0.0125 | 87 | 100 | D1078 |
| 62 | 0.0125 | 271 | 100 | D1079 |
| 85 | 0.0125 | 510 | 100 | D1077 |

Heavy weight tin foil discs

| Diameter (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|---------------|----------------|-------------|------|--------|
| 30 | 0.2 | 100 | 100 | D1065 |

Ultra-light weight tin foil discs

Weigh approximately 40% less than the standard range. These lower weight squares produce less swarf build-up in combustion tubes, have lower blank values and provide more available oxygen for the effective combustion of the sample.

| Diameter (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|---------------|----------------|-------------|------|--------|
| 11 | 0.008 | 5 | 100 | D1070 |
| 13.5 | 0.008 | 8 | 100 | D1071 |
| 16 | 0.008 | 11 | 100 | D1073 |
| 21 | 0.008 | 19 | 100 | D1074 |
| 30 | 0.008 | 39 | 100 | D1076 |

Silver foil discs

Manufactured from high purity silver foil. Suitable for routine use.

| Diameter (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|---------------|----------------|-------------|------|--------|
| 11 | 0.015 | 15 | 100 | D2060 |
| 13.5 | 0.015 | 22 | 100 | D2061 |
| 16 | 0.015 | 31 | 100 | D2063 |
| 21 | 0.015 | 54 | 100 | D2064 |
| 30 | 0.015 | 110 | 100 | D2066 |

Aluminium foil discs

Manufactured from high purity aluminium foil. Suitable for routine use.

| Diameter (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|---------------|----------------|-------------|------|--------|
| 11 | 0.015 | 4 | 100 | D3060 |
| 13.5 | 0.015 | 6 | 100 | D3061 |
| 16 | 0.015 | 8 | 100 | D3063 |
| 21 | 0.015 | 14 | 100 | D3064 |
| 30 | 0.015 | 28 | 100 | D3066 |



Foil Squares and other sample encapsulation

CHNOS analysis

(all outlines actual size)







D1067 D1081 D3081



D1068 D1082 D3082 D1116



Di

Foil Squares

Standard weight tin foil squares Ma

| anufactured fr | om high quality tir | Suitable for rou | itine use. | |
|----------------|---------------------|--------------------------------------|------------|--------|
| Size (mm) | Thickness (mm | n) Weight (mg) | Pack | Cat no |
| 22 x 22 | 0.0125 | 4 | 100 | D1062 |
| 30 x 30 | 0.0125 | 82 | 100 | D1067 |
| 37 x 37 | 0.0125 | 125 | 100 | D1068 |
| 37 x 37 | 0.0125 | 125 | 400 | D1116 |
| 43 x 43 | 0.0125 | 168 | 100 | D1085 |
| 50 x 50 | 0.0125 | 225 | 100 | D1115 |
| 50 x 50 | 0.0125 | 225 | 500 | D1118 |

Ultra-light weight tin foil squares

Weigh approximately 40% less than the standard range. These lower weight squares produce less swarf build-up in combustion tubes, have lower blank values and provide more available oxygen for the effective combustion of the sample.

| | ,0 | | | |
|-----------|----------------|-------------|------|--------|
| Size (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
| 22 x 22 | 0.008 | 28 | 100 | D1080 |
| 30 x 30 | 0.008 | 52 | 100 | D1081 |
| 37 x 37 | 0.008 | 80 | 100 | D1082 |

Silver foil squares

Manufactured from high purity silver. Suitable for routine use.

| Size (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|-----------|----------------|-------------|------|--------|
| 15 x 15 | 0.015 | 35 | 100 | D2080 |
| 20 x 20 | 0.015 | 63 | 100 | D2081 |
| 25 x 25 | 0.015 | 98 | 100 | D2082 |
| 35 x 35 | 0.015 | 192 | 100 | D2084 |

Aluminium foil squares

Manufactured from high purity aluminium. Suitable for routine use.

| Size (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
|-----------|----------------|-------------|------|--------|
| 22 x 22 | 0.015 | 19 | 100 | D3080 |
| 30 x 30 | 0.015 | 36 | 100 | D3081 |
| 37 x 37 | 0.015 | 55 | 100 | D3082 |

Nickel foil squares

| Suitable for routin | ne use. Annealed. | | | |
|---------------------|-------------------|-------------|------|--------|
| Size (mm) | Thickness (mm) | Weight (mg) | Pack | Cat no |
| 25 x 25 | 0.015 | 83 | 100 | D3505 |

Other Sample Encapsulation

| Ca | tno I | Pack | Description | | | | |
|---------------------------|------------|--------|----------------|---------|-------------|------|--------|
| D1 | 117 | 190 | Rapid Caps | | | | |
| D9 | 004 | 400 | Gel Capsule | s 7.5 | x 24mm | | |
| D9 | 005 | 400 | Gel Capsule | s 8.5 | x 25mm | | |
| E20 | 021 | 100 | Gel Capsule | s 5 x ' | 15mm | | |
| E2 | 141 | 100 | Gel Capsule | s 5.5 | x 17mm | | |
| E2 | 142 | 100 | Gel Capsule | s 6 x 1 | 19mm | | |
| Tin Foil C | ones | | | | | | |
| | ht (mg) | Pac | sk (| at no | | | |
| - | 20 | 10 | | 09001 | | | |
| | | | | | | | |
| 1: | 20 | 150 | 00 L | 09010 | | | |
| 2 | 24 | 10 | 0 E | 9002 | | | |
| 2: | 24 | 40 | 0 E | 9003 | | | |
| Nickel Boat Liners | | | | | | | |
| Length (mm) | Width (mm) | Height | (mm) Volume (µ | u) V | Veight (mg) | Pack | Cat no |
| 50 | 15 | 8 | 6000 | | 200 | 100 | D5300 |
| 66 | 21 | 11 | 15246 | | 368 | 10 | D5310 |
| Tin Foil Evaporating Cups | | | | | | | |

Ideal for drying liquid samples down to residues prior to feeding into an elemental analyser. The shape has been designed so that the residue forms in the bottom of the cup and allows easy folding. Capacity is approximately 10 cc.

| iameter (mm) Height (mm) Volume (µl) Weight (mg) Pack Cat no 24 28 4220.16 390 48 D8012 | | | | | | |
|---|--------------|-------------|-------------|-------------|------|--------|
| 24 28 4220.16 390 48 D8012 | iameter (mm) | Height (mm) | Volume (µI) | Weight (mg) | Pack | Cat no |
| | 24 | 28 | 4220.16 | 390 | 48 | D8012 |

Elemental Microanalysis metal foil squares are ideal for the encapsulation of sticky, fibrous or other samples which are difficult to handle using conventional pressed capsules. A small dab or a few fibres on a square is easily encapsulated by folding the foil around the sample. With a little practice even glass fibre filters can be rolled up in foil squares to form neat cylinders which fit the instrument carousel.

Foil squares available in other materials.





Cellulose Capsules D9004



Tin Foil Cone D9001



Tin Foil Evaporating Cup D8012

CHNOS analysis

Tools and Accessories

Elemental Micro**analysis**

| Cat no | Pack | Description |
|--------|------|---------------------------|
| E2065 | 1 | Cell Well 12 Flat Bottom |
| E2064 | 1 | Cell Well 24 Flat Bottom |
| E2063 | 1 | Cell Well 48 Flat Bottom |
| E2066 | 1 | Cell Well 6 Flat Bottom |
| E2044 | 1 | Cell Well 96 Flat Bottom |
| E2062 | 1 | Cell Well 96 Round Bottom |
| | | |



| | | Spatulas |
|--------|------|------------------------------------|
| Cat no | Pack | Description |
| E2000 | 1 | Spatula Stainless Steel |
| E2290 | 1 | Spatula Micro Single Ended |
| E2291 | 1 | Spatula Micro Spoon Formed Bent |
| E2292 | 1 | Spatula Micro Spoon |
| F5103 | 1 | Spatula double ended |
| F5104 | 1 | Spatula double ended (Left Handed) |



Sealing Devices

| Pack | Description |
|------|------------------------------|
| 1 | Mole Grips Miniature |
| 1 | Sealing Device for Liquids |
| 1 | Sealing Device Solid Samples |
| | 1 |



Cat no

E2016

E2017

E2018

E2293

Pack

1

1

1

1

Description

Forceps Stainless Steel Curved Points

Forceps Stainless Steel Straight Points

Forceps Stainless Steel Blunt Points

Dressing Forceps curved points



Chromosorb and Absorbent Discs

| Cat no | Pack | Description |
|--------|------|-----------------------|
| B3015 | 10g | Chromosorb W 30-60 Me |
| B3017 | 25g | Chromosorb W 30-60 Me |
| B3018 | 100g | Chromosorb W 30-60 Me |
| E2105 | 100 | Absorbent Discs 3.5mm |

lesh Acid Washed

lesh Acid Washed lesh Acid Washed 502 283



LITERATURE REQUEST FAXBACK FORM

For full details of all the products we supply for your instrument please copy this page and fax back to us. +44 (0) 1837 54544 or your local dealer:

| | Catalogues Micro (CHN / O / S) Inorganic (C / S, N / O, H) | L | | |
|------------|---|---|------|--|
| | Carbon Sulphur N Protein Trace/TOC IRMS Supplement Macro (CHN / NC / NCS) | | | |
| | Contract Analysis Service | | | |
| Name | | | | |
| ganisation | | | | |
| Address | | | | |
| | | | | |
| Tel | | | | |
| Fax | | | | |
| E-mail | | | | |

Elemental Microanalysis Ltd • Hameldown Road • Okehampton Business Park • Exeter Road • Okehampton • Devon EX20 1UB • United Kingdom Tel: +44 (0)1837 54446 • Fax: +44 (0)1837 54544 • E-mail: info@microanalysis.co.uk • Website: www.microanalysis.co.uk Company Registration No: 1281028 • VAT No: 217 5194 65