

# gtgNews 2010

**Autosampler Vials & Caps  
Storage and Septum Vials  
Special Vials  
& Polypropylene Syringes**

## News Brochure 2010



**GTG**

**Glastechnik Gräfenroda GmbH**

Wiesenweg 35, D-99330 Gräfenroda; Fax: 036205 77 228; Produktion Tel: 036205 76 228  
e-mail: [info@gtgvials.de](mailto:info@gtgvials.de); info-Line Tel: 036205 77 229

## PP-Pure Vial - Polypropylene Vial for 100 - 700 $\mu$ l Sample Volumes

Vial from specially pure Polypropylene, can be used universally for Volumes between 100  $\mu$ l and 700  $\mu$ l. Available with Snap/Crimp Top or Agilent compatible Screw Top. Snap/Crimp Vials can be closed with Snap Caps as well as classc Crimp Caps.



### G002-SC-PP17 $\mu$

700  $\mu$ l Snap/Crimp Vial,  
Polypropylene  
for volumes from 100  $\mu$ l - 700  $\mu$ l  
size: 12 x 32 mm

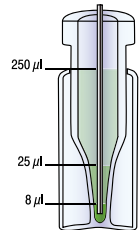


### G004-HP-PP17 $\mu$

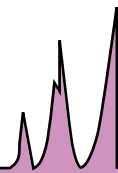
700  $\mu$ l Agilent compatible Screw Vial,  
Polypropylene,  
for volumes from 100  $\mu$ l - 700  $\mu$ l  
size: 12 x 32 mm

## iV2 $\mu$ -Vial - the ideal Solution for Samllest Volatile Samples

- Insert closed with Cap: therefore ideal for volatile samples, when a sample is stored in the fridge over an extended period of time, for microreactions or when the sample has to be shaken
- long slim taper; very low dead volume (< 5 $\mu$ l) & suitable for side-hole needles
- established 12 x 32 mm all-in-one Design



<b>Crimp iV2<math>\mu</math></b> clear borosilicate glass 8002-CV-H/iV2 $\mu$  amber borosilicate glass 8002-CV-D/iV2 $\mu$	<b>Snap/Crimp iV2<math>\mu</math></b> clear borosilicate glass 8002-SC-H/iV2 $\mu$  amber borosilicate glass 8002-SC-D/iV2 $\mu$	<b>Agilent kompatibel iV2<math>\mu</math></b> clear borosilicate glass 8004-HP-H/iV2 $\mu$  amber borosilicate glass 8004-HP-D/iV2 $\mu$
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## Autosampler Vial Caps with Rubber/PTFE or ms-Pure Silicone/PTFE Septum

### Aluminium Crimp Cap with Rubber/PTFE Septum

Our standard caps are tested for extractable substances in co-operation with Interlabor Belp (CH). For the easy handling in the laboratory our caps are supplied in clear screw-top PET jars.



### Snap Cap with ms-Pure Silicone/PTFE Septum

The MS-Pure Silicone/PTFE Septum is a septum from natural non-pigmented silicone and natural PTFE that proved 60 % cleaner than „standard“ silicone/PTFE septa from competitors. With the increasing sensitivity of GC's and HPLC's there is an increased need for low bleed septum material to reduce the potential for sample error and to improve overall reliability.



### Agilent compatible Screw Cap with ms-Pure Silicone/PTFE Septum



clear	G003-AC-Ru/Te	clear	G003-SCC-SKFK10	blue	G004-HP-CB-SKFK10
blue	G003-ACB-Ru/Te	blue	G003-SCB-SKFK10	black	G004-HP-CS-SKFK10
green	G003-ACG-Ru/Te	red	G003-SCR-SKFK10	red	G004-HP-CR-SKFK10
yellow	G003-ACY-Ru/Te			yellow	G004-HP-CY-SKFK10

## 8 mm Screw Caps with and without flange for Narrow Mouth Screw Vials



Our 8 mm Narrow Mouth Screw Caps are available as standard Cap and Screw Cap with flange for Japanese Autosamplers, where the vial hangs in the rack by the cap. Chose from six cap colours. The silicone/PTFE septum is also available pre-slit. Test our Narrow Mouth Screw Vials and

Caps by ordering one of our practical Screw Vial Kits which comprise:

1.5 ml Narrow Mouth Screw V-Vial, clear (H) or amber borosilicate glass (D), 1 mm thick, non-pigmented ms-Pure Silicone/PTFE Septum & 8 mm Screw Cap standard or 8 mm Screw Cap with flange for Japanese Autosampler.



**GNM4\*-SKFK10-H/V15 $\mu$**   
clear borosilicate glass

**GNM4\*-SKFK10-D/V15 $\mu$**   
amber borosilicate glass



**GNM4J\*-SKFK10-H/V15 $\mu$**   
clear borosilicate glass

**GNM4J\*-SKFK10-D/V15 $\mu$**   
amber borosilicate glass

replace \* with the cap colour of your choice

B = blue  
G = green

R = red  
S = black

W = white  
Y = yellow



## VMax-Vial - the big „Vase“ for Optimized Microsampling

- big Vase Vials up to 60 ml
- no support needed
- can be produced with any volume up to 60 ml
- with crimp or screw-top
- ideal for automated sample preparation
- special sizes on request



3.5 ml Screw VMax-Vial  
size: 14 x 45 mm  
screw thread 13-425

**G072-14/045-H/VM $\mu$**   
clear borosilicate glass

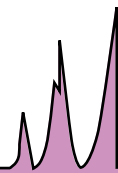
**G072-14/045-D/VM $\mu$**   
amber borosilicate glass

## 13 mm Screw Caps in 6 colours

**G075-C\*/15**  
closed-top PTFE lined screw cap

**G074\*-SKFW16/13**  
open-top Screw Cap  
with clear silicone/  
PTFE Septum










## Headspace Screw Vial with magnetic Screw Cap

Headspace Chromatography requires the vial to be tightly sealed and the closure to withstand pressure. This requires some effort, and is tiring when closing larger series. Our newly developed screw-top Headspace Vial only requires a torque < 1 Nm for a pressure tight seal while common solutions require a torque > 8 Nm.

*Design Registration No. DE 20 2007 008 595,8; Priority Date 15. June 2007*



20 ml Headspace Vial, clear glass, 23 x 75 mm and screw cap with septum

	grey Butyl Rubber/PTFE	up to 150°C	<b>GHS6*-20R-BZFZ31-H</b>
	blue Silicone/grey PTFE	up to 150°C	<b>GHS6*-20R-SBFZ31-H</b>
	clear Silicone/white PTFE	up to 150°C	<b>GHS6*-20R-SKFW32-H</b>
	white Silicone/red PTFE	up to 150°C	<b>GHS6*-20R-SWFR31-H</b>
	white Silicone/red PTFE,	up to 120°C	<b>GHS6*-20R-SWFR16-H</b>

\* replace \* with the cap colour of your choice: B = blue, G = green, R = red, S = black, W = white, Y = yellow

## 20 mm Crimp Cap with ms-Pure Silicone/PTFE Septum

The ms-Pure Silicone/PTFE Septum is from natural non-pigmented Silicone/PTFE. This is 60 % cleaner than other „standard“ Silicone/PTFE Septums on the market. With the increasing sensitivity of GC's and HPLC's there is an increased need for low bleed septum material to reduce the potential for sample error and to improve overall reliability.



**G007-MAC\*-SKFK30**  
magnetic blue (\* = B) or red (\* = R)  
Aluminium Crimp Cap with ms-Pure  
Silicone/PTFE Septum



**8007-ACC-SKFK30**  
Aluminium Crimp Cap with  
ms-Pure Silicone/PTFE Septum

## Storage Vials from 1 - 60 ml



With the two additional vial diameters 17 & 23 mm our Storage Vial line is even more comprehensive offering a wide choice of vials with volumes ranging from 1 ml to 60 ml and PTFE lined closed-top screw caps in 6 different colours. For extra convenience our Storage Vials are packed in high quality cardboard boxes with a grit divider for 100 vials.

### Storage Vial Kit

With our Storage Vial Kits you always have the right vials in stock. Volumes and cap colours are assorted.



#### G075X-12Kit02-H

clear borosilicate glass

with Vials 12 mm ø, up to 2 ml

#### G075X-12Kit02-D

amber borosilicate glass



Quantity	Height	Volume
35 pcs.	24 mm	1 ml
30 pcs.	32 mm, V-Vial	1.5 ml
35 pcs.	32 mm	2 ml

#### G075X-14Kit05-H

clear borosilicate glass

with Vials 14 mm ø, up to 5 ml

#### G075X-14Kit05-D

amber borosilicate glass



Quantity	Height	Volume
35 pcs.	30 mm	2.5 ml
30 pcs.	45 mm	4 ml
35 pcs.	50 mm	5 ml

#### G075X-17Kit10-H

clear borosilicate glass

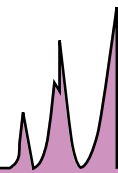
with Vials 17 mm ø, up to 10 ml

#### G075X-17Kit10-D

amber borosilicate glass



Quantity	Height	Volume
20 pcs.	27 mm	2.5 ml
20 Stk	35 mm	3.75 ml
20 pcs.	42 mm	5 ml
20 pcs.	60 mm	7.5 ml
20 pcs.	72 mm	10 ml



**G075X-19Kit15-H**  
clear borosilicate glass



with Vials 19 mm  $\varnothing$ , up to 15 ml

Quantity	Height	Volume
25 pcs.	37 mm	5 ml
25 pcs.	50 mm	7.5 ml
25 pcs.	65 mm	10 ml
25 pcs.	85 mm	15 ml

**G075X-19Kit15-D**  
amber borosilicate glass

**G075X-23Kit25-H**  
clear borosilicate glass



with Vials 23 mm  $\varnothing$ , 7.5 - 25 ml

Quantity	Height	Volume
20 pcs.	37 mm	7.5 ml
20 pcs.	45 mm	10 ml
20 pcs.	60 mm	15 ml
20 pcs.	75 mm	20 ml
20 pcs.	85 mm	25 ml

**G075X-23Kit25-D**  
amber borosilicate glass

**G075X-27Kit25-H**  
clear borosilicate glass



Vials 27 mm  $\varnothing$ , up to 25 ml

Quantity	Height	Volume
25 pcs.	37 mm	10 ml
25 pcs.	47 mm	15 ml
25 pcs.	57 mm	20 ml
25 pcs.	68 mm	25 ml

**G075X-27Kit25-D**  
amber borosilicate glass

**G075X-27Kit60-H**  
clear borosilicate glass



Vials 27 mm  $\varnothing$ , up to 60 ml

Quantity	Height	Volume
25 pcs.	78 mm	30 ml
25 pcs.	95 mm	40 ml
25 pcs.	118 mm	50 ml
25 pcs.	140 mm	60 ml

**G075X-27Kit60-D**  
amber borosilicate glass

## Septum Vials from 1 - 60 ml



Our Storage Vials with diameters 12, 14, 19 & 27 mm and Volumes from 1 - 60 ml are also available as Septum Vials with open-top Screw Cap and Silicone/PTFE Septum. Like our Storage Vials, they are packed per 100 pcs in high quality cardboard boxes with a grit divider for extra convenience.

### Septum Vial Kit

With our Septum Vial Kits you always have the right vial size in stock.

Vial volumes and cap colours are assorted.

*Do you need a specific cap colour. AS producer, we can produce caps in the colour of your choice.*



### with 1 mm thick white Silicone/red PTFE Septum

#### G074X-12Kit02-SWFR10-H

clear borosilicate glass

#### G074X-12Kit02-SWFR10-D

amber borosilicate glass



### with Vials 12 mm $\varnothing$ , up to 2 ml

Quantity	Height	Volume
35 pcs.	24 mm	1 ml
30 pcs.	32 mm, V-Vial	1.5 ml
35 pcs.	32 mm	2 ml

### with 1.6 mm thick clear Silicone/white PTFE Septum

#### G074X-14Kit05-SKFW16-H

clear borosilicate glass

#### G074X-14Kit05-SKFW16-D

amber borosilicate glass



### with Vials 14 mm $\varnothing$ , up to 5 ml

Quantity	Height	Volume
35 pcs.	30 mm	2.5 ml
30 pcs.	45 mm	4 ml
35 pcs.	50 mm	5 ml

### with 1.6 mm thick clear Silicone/white PTFE Septum

#### G074X-17Kit10-SKFW16-H

clear borosilicate glass

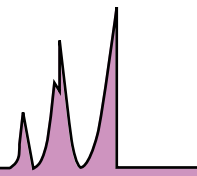
#### G074X-17Kit10-SKFW16-D

amber borosilicate glass



### with Vials 17 mm $\varnothing$ , up to 10 ml

Quantity	Height	Volume
20 pcs.	27 mm	2.5 ml
20 Stk	35 mm	3.75 ml
20 pcs.	42 mm	5 ml
20 pcs.	60 mm	7.5 ml
20 pcs.	72 mm	10 ml



with 1.6 mm thick clear Silicone/white PTFE Septum

**G074X-19Kit15-SKFW16-H**

clear borosilicate glass

**G074X-19Kit15-SKFW16-D**

amber borosilicate glass



with Vials 19 mm ø, up to 15 ml

Quantity	Height	Volume
25 pcs.	37 mm	5 ml
25 pcs.	50 mm	7.5 ml
25 pcs.	65 mm	10 ml
25 pcs.	85 mm	15 ml

with 3.4 mm thick clear Silicone/white PTFE Septum

**G075X-27Kit25-SKFW34-H**

clear borosilicate glass

**G075X-27Kit25-SKFW34-D**

amber borosilicate glass



Vials 27 mm ø, up to 25 ml

Quantity	Height	Volume
25 pcs.	37 mm	10 ml
25 pcs.	47 mm	15 ml
25 pcs.	57 mm	20 ml
25 pcs.	68 mm	25 ml

with 3.4 mm thick clear Silicone/white PTFE Septum

**G075X-27Kit60-SKFW34-H**

clear borosilicate glass

**G075X-27Kit60-SKFW34-D**

amber borosilicate glass









Vials 27 mm ø, up to 60 ml

Quantity	Height	Volume
25 pcs.	78 mm	30 ml
25 pcs.	95 mm	40 ml
25 pcs.	118 mm	50 ml
25 pcs.	140 mm	60 ml

## Polypropylene Syringes with Luer Slip






	Volume		Volume
	1 ml with Luer Slip <b>G899-PP01</b>		10 ml with Luer Slip <b>G899-PP10</b>
	3 ml with Luer Slip <b>G899-PP03</b>		20 ml with Luer Slip <b>G899-PP20</b>
	5 ml with Luer Slip <b>G899-PP05</b>		50 ml with Luer Slip <b>G899-PP50</b>

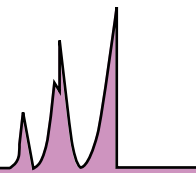
## HPLC Syringe Filters with 4, 13 & 25 mm Diameter

**Luer-Lock**  
eliminates filter blow-off

**Membrane & Porosity imprinted**  
on filter housing for certain identification

Colour coded **Sealing Ring** prevents housing burst  
(protection when handling organic solvents)

Sample Volume	up to 2 ml	up to 10 ml	up to 100 ml
			
Filter ø	4 mm Filter	13 mm Filter	25 mm Filter
Sample Loss	< 7.5 µl	< 25 µl	< 50 µl



## Pre-cleaned Vials for TOC and other critical applications



We offer surface treatment for vials. Thus we can add an opaque coating or customise, siliconise, silanise, wash, sterilise and pyrogenise vials.

### Round bottom Vials



<b>Volume</b>	<b>3.5 ml</b>
<b>Size</b>	12 x 43 mm
<b>Closure</b>	11 mm crimp-top
<b>Product No.</b>	G052-12/043-H



<b>Volume</b>	<b>4 ml</b>
<b>Size</b>	14 x 45 mm
<b>Closure</b>	13 mm screw-top
<b>Product No.</b>	G052-14/045-H



<b>Volume</b>	<b>10 ml</b>
<b>Size</b>	16 x 75 mm
<b>Closure</b>	15 mm screw-top
<b>Product No.</b>	G052-16/075-H/W12

<b>Volume</b>	<b>14 ml</b>
<b>Size</b>	16 x 100
<b>Closure</b>	15 mm screw-top
<b>Product No.</b>	G052-16/100-H/W12

### Fraction Collection Tubes



<b>Volume</b>	<b>15 ml</b>
<b>Size</b>	16 x 100 mm

<b>Wall Thickness</b>	1.00 mm
<b>Product No.</b>	8052-16/100-H/W10

## What have Garden Gnomes and Vials in common?

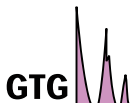
We often hear this question, the answer is simple:  
Both are from Gräfenroda.

Gräfenroda is considered the birthplace of the Garden Gnomes, where, since 1874, the Philipp Griebel Garden Gnome Manufactory produces the familiar Garden Gnome from terra cotta. The manufactory survived 2 World Wars and the nationalisation in GDR times to VEB Terrakotta; today it is run in 4. generation by the great grandson of the founder. The garden gnomes are hand crafted by Reinhard Griebel and lovingly painted by hand by his team. Thus each gnome is unique and an evidence of the Thuringia craftsmanship.

Gnomes are considered to represent the miners and symbolise diligence, honesty, hard work and modesty by their shortness. The gnome lives in dualism of reality and virtuality and perceptive people call him patron of home and yard. That's why the gnome, perceived as virtual personality, is given a name.

Glastechnik Gräfenroda GmbH was founded after the „Wende“ (reunification) and produces laboratory vials for Chromatography and chemical analysis. We are a small, traditional, family owned producer. We are attached to our home county Thuringia and indebted to our international co-operation with our Swiss partner infochroma ag. We don't just want to produce and offer products in our field: we are consistently questioning and optimising every step from the development to the final control of a product, in order to supply you with useful vials as a solution for your daily chemical analysis. Our focus is to achieve a consistently high quality and to maintain it. With deliberate lateral thinking we are looking for solutions, to develop products for new applications.

With the garden gnome, we have found a symbol for our efforts. Rosa Maria our Laboratory Lady Gnome shall present you with a piece of our Thuringia home and it's craftsmanship and be the patron saint of your laboratory. With her virtual personality, she will, with diligence and honesty, watch over the correctness and accuracy of your analysis and protect your laboratory from wrong. For as the Book of books condescends to say: Faith moves mountains.



## Glastechnik Gräfenroda GmbH

Wiesenweg 35, D-99330 Gräfenroda; Fax: 036205 77 228; Produktion Tel: 036205 76 228  
e-mail: [info@gtgvials.de](mailto:info@gtgvials.de); info-Line Tel: 036205 77 229