




PASSION
INNOVATION

PLASTICS
PACKAGING

kp kläger plastik

vema

CONTENTS

Spray systems and packaging solutions made from plastic.....	3
Innovation, Know-How and flexibility of a full service provider.....	4
News Bottles	5
News Compressed Air Sprayers	7
Overview Compressed Air Sprayers	8
Compressed Air Sprayers	9
Extensions and container imprints	10
Compressed Air Sprayer Hobby and Profi.....	11
Compressed Air Sprayer Vario	12
Trigger sprayers.....	13
Trigger sprayer K5	14
Trigger sprayer K2 and K3	15
Trigger sprayer K4 and K1	16
Bottles and screw caps	17
Conical and long-neck bottles	19
Cylindrical bottles.....	20
Cylindrical and flat bottles	22
Conical and cylindrical bottles.....	23
Square and conical bottles.....	24
Screw caps	25
Fingertip sprayers.....	26
Fingertip sprayers and dispenser.....	27
Development Moulds plastic technology	28
 Contract packaging	30

Spray systems and packaging solutions made from plastic

Product portfolio



Compressed Air Sprayers

Robust and innovative spraying devices for large-area and flexible application with filling volumes of 1.0 to 1.6 litres and maximum operating pressure of 3 to 4 bar

- Processing high-quality plastics, seals and springs for a long service life under heavy load
- Equipping all compressed air sprayers with an automatic overpressure valve
- 100% leakage and safety valve check within the assembly line
- Traceability due to engraved device test number in the compressed air sprayer
- **Bottle available made from 100 % bioplastic**



Trigger Sprayers

High-quality reusable and disposable Trigger Sprayers with long service life and ageless design, discharge rate of 0.8 ml to 1.2 ml per stroke

- Application in industry, workshop, household and garden
- Function test as an end check
- Standard colour combinations and threads
- Can be combined with different plastic bottles



Plastic Bottles

Standard product range of solid HDPE and PET-G packaging solutions in a sleek design with filling volumes from 20 ml up to 1000 ml.

- Comprehensive range of cylinder, conical, long-neck, square, flat and pyramid bottles
- Certain types of bottles available with tactile warning and view strip
- Development of packaging solutions specifically for the customer
- **HDPE bottles available made from 100 % bioplastic**



UV Screen Printing

Decoration in UV screen printing process for identification, emphasis and refinement of plastic bottles

- Glowing and high gloss finish for the best possible covering capability
- Good resistance to chemicals
- Excellent resistance to abrasion
- Prints realistic as photographs possible (after individual check)

www.klaeger-plastik.de

Innovation, know-how and flexibility of a full-service provider

Core expertise

Near Augsburg, Kläger Plastik GmbH (Neusäss, Bavaria) also produces compressed air sprayers and hand spray devices in elegant plastic bottles, as well as closures with high vertical integration.

Depending on the request of the customer and shape of the bottle, the hollow bodies, made from HDPE, can be individually decorated, fully automatic, with high-gloss UV colours using screen printing.

MADE IN GERMANY

As a manufacturer in processing plastics for more than 40 years, Kläger Plastik is a reliable partner with competence and expertise.

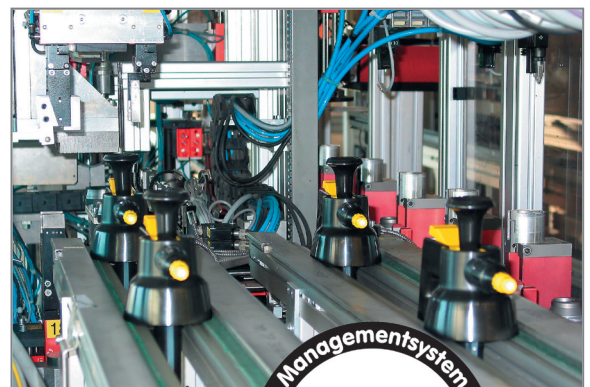
On an overall production area of 7000 m², all processes are continuously improved in order to be able to deliver the highest quality to the customer just in time.

Performance portfolio

- Development & design
- Tool & mould construction
- Injection moulding (20 machines)
- Extrusion blow moulding (16 machines)
- Screen & pad printing (4 machines)
- Component assembly (4 systems)
- Dispatch & logistics (40 % export ratio globally)
- Full-services (e.g. resistance tests)

Certifications

- Quality management system – certified in accordance with DIN EN ISO 9001
- Environmental management system– certified in accordance with DIN EN ISO 14001



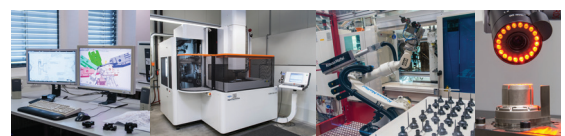
kläger group

kp kläger plastik

Hartha branch

- Development & design
- Tool & mould construction
- Manufacture of precise, technical parts from plastic
- Quality management

www.klaeger-plastik-hartha.de



vema

Neusäss site

- Preparation of recipes & product development
- Manufacture of bulk goods
- Filling aerosol spray & fluids according to customer orders
- Packaging & logistics

www.vema-industrieverpackung.de



BOTTLES | NEW PRODUCTS



Oval bottle Cécille 200ml



The well-shaped oval bottle **Cécille 200ml** combines puristic design with high user-friendliness and good grip. It is perfectly suitable for packaging cosmetics and products for medicine, household and technology.

Product characteristics

- Material HDPE
- Colour natural or white
- Height of bottle 158 mm
- Weight 20 grams
- Thread 20 mm or 24 mm
- UV screen printing and labelling option
- Compatible with the new Mini Trigger Sprayer and M VII fingertip sprayer



Cylinder bottle Picò 150ml



The elegant cylinder bottle **Picò 150ml** features clear design and an ageless silhouette. Label can be printed fully automatic and, thus, can be optically adapted to every customer requirement.

Product characteristics

- Material HDPE
- Colour natural or white
- Height of bottle 142 mm
- Weight 15 grams
- Thread 24 mm
- Multi-colour UV screen printing possible
- Compatible with the new Mini Trigger Sprayer



Both products available with tactile warning triangle and **bottle made from 100% bioplastic**



BOTTLES | NEW PRODUCTS



Bottles with transparent view strip



In order to be able to easily view the fill level, plastic bottles with a transparent view strip are suitable. The view strip is particularly advantageous in application fields such as handcraft and engineering in which fluids, for example oil, are processed.

At present available in the following bottles

- Cylinder bottle Cyl. 1000H
- Pressure Sprayer bottle for Hobby Plus 1.2L



On special request by the customer, there is the option to also integrate the transparent view strip in other types of bottles.

Bottles with tactile warning



With immediate effect, identification of filled, fluid hazardous substances in plastic packaging, in accordance with DIN ISO 11683, is available as follows:

Tactile warning integrated into the plastic bottle

- for cylinder bottle Cyl. 1000H
- for oval bottle Cécille 200ml



Embossed warning triangle printed using UV screen printing

- on individual agreement
- for entire range of bottles



Suitability of the warnings in UV screen printing has been tested by a training and aid centre for blind and visually impaired people.

COMPRESSED AIR SPRAYERS | NEW PRODUCTS



Profi Micro 1.5L



The **Profi Micro 1.5L** weighs 460 grams and, with the short nozzle head, represents a version of the Profi 1.5L optimized for the price. The automatic overpressure valve permits an operating pressure of 3 bar with maximum contents of 1.5 litres.

Equipped with

- integrated scale for optical control of the fill level
- “EasyOpen” haptic elements



Hobby Plus 1.2L



The 380 gram light and innovative **Hobby Plus 1.2L** features a maximum filling volume of 1.2 litres. The proven technology of the Hobby 1.0L further developed – with larger bottle and “AntiGlide” foot together with integrated soft components.

Equipped with

- transparent viewing strip
- integrated scale for optical control of the fill level
- “EasyOpen” haptic elements



Both products available with 360° spray function and bottle made from 100% bioplastic



COMPRESSED AIR SPRAYERS | OVERVIEW

Products



Hobby 1.0L Profi Micro 1.5L Hobby Plus 1.2L Profi 1.5L Vario 1.6L

Maximum contents



0.9L

1.5L

1.2L

1.5L

1.6L

Nozzle head



short

short

short

long

short

Maximum operating pressure



3 bar

3 bar

3 bar

4 bar

3 bar

Integrated filling scale



✓

✓

✓

✓

Haptic elements



✓

✓

✓

360° spraying – overhead –



✓

✓

✓

✓

2-component foot ring



✓

Transparent viewing strip



✓

✓

Compressed air connection



✓

✓ standard features ✓ optional

Options available for all Compressed Air Sprayers

- | Brass nozzle | UV screen printing – multicolour | Safety button |
- | Continuous spray button | Plastic extension | **Bottle 100 % made from bioplastic** |



Consistency versions*

| Tech Line

- PA FKM V2A for many fluids containing solvent
- PP FKM V4A for fluids containing acid
- PP EPDM V2A for fluids containing alkaline
- PA EPDM V2A for special fluids containing solvent

- PA expert-FKM V2A for fluids containing aggressive solvent
- PP expert-FKM V4A for fluids containing aggressive acid
- | Home & Garden Line
- PP NBR V2A for water-based fluids

*anticipated consistency, accurate determination of the recommended version by Kläger Plastik after checking a sample consignment from the customer.



COMPRESSED
AIR SPRAYERS

 kläger plastik

Compressed Air Sprayers

Is your liquid used in the industry, in the crafts trade or in workshops, meaning sectors that require robust sprayers? Intended for large surfaces and to be handled as comfortable as possible? If this is the case, our Compressed Air Sprayers

Hobby (fill volume 1.0 liters),
Profi (fill volume 1.5 liters) and
Vario (fill volume 1.6 liters)

are the ideal solution for you.

With the Hobby and Profi models, the pressure build-up is realised by pumping with a pump rod. An integrated safety valve triggers automatically as soon as the admissible operating pressure is reached.

A mere push on the spray button ensures an even and constant mist, which can be regulated by turning the nozzle nut.

Illustration 1 and 2 The Vario can also be used for other applications: The work range with compressed air (min. 6 bar) can supply the required operating pressure via the Vario pump rod in 1 to 2 seconds.

The best is just about good enough for us with respect to the materials we use in production. Together with the highest-quality materials available on the market, we manufacture the metal components in the compressed air sprayer exclusively of stainless steel grade V2A. An UV stabilizer is added to the natural colour pressure container to ensure the highest possible tension crack resistance.

Individual components like seals, springs, conical nipples etc. can be adapted to the respective application purpose. We convert your device for spraying acids, solvents and other chemicals to meet your demands. Rely on us to solve all your application problems.



Extensions + Container Imprints for Compressed Air Sprayers



Extensions for Hobby • Profi • Vario

Plastic extension 30 cm standard NBR or Viton / V2A

Plastic extension 30 cm NBR / foam nozzle

Plastic extension 30 cm NBR / flat jet nozzle

Brass extension 30 cm / 50 cm (nickel-plated on demand)

Screen printing on the container of the Compressed Air Sprayer

Printing detail specifications for the Hobby 1,0 l

Max. number of printing colours: 5

Width: 305 mm Height: 80 mm

Printing detail specifications for the Profi 1.5 l

Max. number of printing colours: 2

Specification of the printing surface after provision of a cone radius drawing by the customer.

Printing detail specifications for the Vario 1.6 l

Max. number of printing colours: 5

Width: 410 mm Height: 60 mm



Coloured and special designs available on request!

Technical changes reserved. Status: March 2014



Compressed Air Sprayer
Hobby
1.0 Litre

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical data

Pressure build-up in the liquid container by pumping. A mere push on the spray button ensures an even and constant mist, which can be regulated by turning the nozzle nut.

Materials: polypropylene, polyethylene, polyamide, glass fibre-reinforced, stainless steel, NBR (standard)

Cont. volume: 1,0 l max. Fill quantity: 0.9 l

Operating pressure: 3 bar / safety valve !

Nozzles: MS Ø 0.5 + 0.8 mm
KST Ø 0.6 + 0.8 mm
fan nozzle
foam nozzle

Accessories: extension lance
child-proof screw cap / container
safety button
permanent spraying operation

Screen printing: possible on the container

A large variety of pumps is available for the most various liquids

The Hobby is a shapely and technically advanced device for spraying large quantities of liquid. The application fields depend on the design. A large number of renowned customers in the most varied industries have confirmed this for years.



Compressed Air Sprayer
Profi
1.5 Litre

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical data

Pressure build-up in the liquid container by pumping. A mere push on the spray button ensures an even and constant mist, which can be regulated by turning the nozzle nut.

Materials: polypropylene, polyethylene, polyamide, glass fibre-reinforced, stainless steel, NBR (standard)

Cont. volume: 1,5 l max. Fill quantity: 1.3 l

Operating pressure: 4 bar / safety valve !

Nozzles: MS Ø 0.5 + 0.8 mm
KST Ø 0.6 + 0.8 mm
fan nozzle
foam nozzle

Accessories: extension lance
child-proof screw cap for container
safety button
permanent spraying operation

Screen printing: possible on the container

A large variety of pumps is available for the most various liquids



Novelty:

With flexible Silicon tube or Viton tube to spray overhead (360° Function)

The Profi is a robust and technically advanced device for the chemical industry.



Application fields:

- Industry
- Car care
- Disinfection
- Sanitary
- Domestic
- Garden, etc.



Application fields:

- Disinfection in hospitals and doctors' offices
- Technical requirements
- Sanitary requirements
- Plant care
- Animal care, etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Compressed Air Sprayer
Vario
1.6 Litre



Technical data

Pressure buildup in the liquid container by connecting the adapter on the Vario pump rod to the compressor's compressed air supply. Pressure buildup through pumping is also possible.

Materials: polypropylene, polyethylene, polyamide, glass fibre-reinforced, stainless steel, viton seals

Cont. volume: 1.6 l Max. fill quantity: 1.4 l

Op. pressure: 4 bar / safety valve ! safety button standard !

Nozzles: KST Ø 0.8 mm

Accessories: Extension lance
Screw cap (childproof) / container permanent spraying operation

Screen printing: possible on the container

There's nothing faster or easier! The work range with compressed air can fill the Vario by pressing the inlet valve on the compressed air connection in 1 to 2 seconds.

Manual charge of the operating pressure using the Vario pump rod is also possible.

We help you with the selection of the right device for your application.

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Novelty:

With flexible Silicon tube or Viton tube to spray overhead (360° Function)

Compressed Air Sprayers

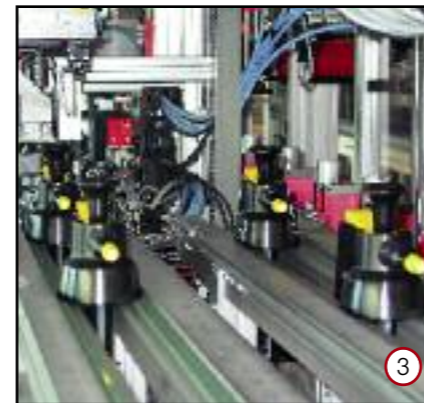
Illustration 3 We produce our Compressed Air Sprayers by means of computer-controlled system assembly. Our quality control system also uses state of the art technologies. After a leak and safety valve test, each device is marked with an engraved device test number. We archive this data in the interest of your and our safety (Product Liability Law).

Illustration 4 However, we still perform a final manual test on the compressed air sprayers because for us, nothing is as important as the quality of our products.

Illustration 5 An additional safety advantage for you and your customers: For a minimal extra charge, we can equip each Compressed Air Sprayer with a safety button to protect it from accidental use. The device can be completely disassembled.

Illustration 6 +7 Both Compressed Air Sprayer Hobby 1,0 l and Profi 1,5 l and Vario 1,6 l is optionally available as of now with permanent spraying operation.

All replacement parts are in stock. Just like all other products, we designed our Compressed Air Sprayers with the highest possible degree of user-friendliness, durability and longevity. This makes our products perfect for demanding everyday use - a fact, which a large number of renowned customers in the most varied industries have confirmed for years.



Application fields :

Industry
Car care
Workshop etc.

Please send us a sample of the liquid(s) together with the dimensions of the respective compressed air reception coupling (we might need a sample of the coupling as well).

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





TRIGGER SPRAYERS

Trigger Sprayer (Reusable)

Illustration 1 Are you a supplier of a high-quality liquid product? Do you distribute your product in a disposable trigger sprayer bottle so far? Are you faced with complaints or even the loss of long-standing customers? The cheap, low-quality sprayer stops working before your customer was able to consume the entire high-quality filling?

We can offer you a solution that will satisfy your customers: Return to the good old reusable variant! Why not offer your product as a refill, e.g. in a canister together with our high-quality elegant trigger sprayer and a shapely bottle imprinted with your company logo?

We supply orders on small quantity demand for our sprayer types K 1, K 2 and K 3. Type K 4 and bottles with your company logo are available as of an order quantity of only 1,000 units.

For more than 30 years now, we manufacture sprayers for use in the industry, in workshops, in homes and gardens. These are designed for a long service life and frequent use.

The production process includes an inlet and discharge valve test for our sprayers, but we do not suffice with that. Each individual sprayer of the types K 1, K 2, K 3 and K 4 must prove its function on our manual test stand after production.

This guarantees your valued customers permanent spray performance, leads to cost savings due to frequent usability and protects the environment.



1

Trigger Sprayer (Disposable)

Illustration 2 and 3 Do you want to supply your product to your customers in bottles for immediate use?

Are you looking for a transport-proof, multi-purpose and high-quality sprayer at an attractive price with a minimum order quantity of only 1,000 units?

If this is the case, our novel trigger sprayer K 5 is perfect for you. The K 5 is also available with a foam nozzle besides the spray nozzle variant.

Our state-of-the-art powerful assembly lines can also produce high quantities in a relatively short time for customers with high order volumes.



2



3

Trigger Sprayer K 5 Disposable

Cap nuts for bottle thread:

- 28 x 4 / 16.5 mm
- 28 x 4 / 14.2 mm
- 28 x 4 / 11.7 mm
- 28 x 3 / 16.5 mm / raster
- 27 x 4 / 14.2 mm
- 25 x 4 / 14.7 mm

Bottleneck height:

min. 11,7 mm

Minimum order quantity:

1.000 pc.



K 5 with spray nozzle

K 5 with foam nozzle

Technical Data

Materials:	polypropylene, polyethylene, stainless steel
Nozzles:	ON/OFF spray nozzle, boring Ø 0.6 mm ON/OFF foam nozzle
Bottle gasket:	PE foam
Spray quantity per press:	approx. 0.8 ml
Hose length:	100 – 280 mm
Transport-proof:	yes
Patented aeration valve	

Suitable bottles to our trigger sprayer please find in our catalogue "BOTTLES".



Application fields:

Cleaning
Maintenance
Sanitary
etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





Trigger Sprayer
K 2
Reusable



Novelty:
With flexible Silicon tube or Viton tube to spray overhead (360° Function)

Cap nuts for bottle thread:

- 28 x 4 / 16.5 mm
- 28 x 4 / 14.2 mm
- 28 x 4 / 11.7 mm
- 27 x 4 / 14.2 mm
- 32 x 4 / 19.7 mm
- 32 x 4 / 15.2 mm
- 25 x 3 / 14.7 mm

Bottleneck height: min. 11,7 mm



K 2L-sprayer with long hose and container screw cap

Technical data

Materials: polypropylene, polyethylene, stainless steel

Nozzles: brass nozzles:
Ø 0.3 mm – fine mist
Ø 0.4 mm – standard fine
Ø 0.6 mm – for viscous liquids

Nozzle adjustment: Continuous

Nozzle nut: Lockable

Spray quantity per press: 1.2 ml ± 0.1

Hose length: 100 – 280 mm

Pad printing: on the cap

Patented aeration valve.

Large selection of standard colour combinations.

Maximum user comfort through ergonomic shape.

Very fine mist through smaller nozzle holes.

Special design in PA available.

Limited extend for transport with filled bottle.

Accessories: Plastic extension 20 cm
Foam nozzle



Application fields:

Industry
Household
Gardening
Hobby
etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Trigger Sprayer
K 3
Reusable



Novelty:
With flexible Silicon tube or Viton tube to spray overhead (360° Function)

Cap nut for bottle thread:

- 28 x 4 / 16.5 mm
- 28 x 4 / 14.2 mm
- 28 x 4 / 11.7 mm
- 27 x 4 / 14.2 mm
- 32 x 4 / 19.7 mm
- 25 x 3 / 14.7 mm

Bottleneck height: min. 11.7 mm

Technical Data

Materials: polypropylene, polyethylene, stainless steel

Nozzles: plastic nozzle: Ø 0.6 mm
other types of nozzles on request

Nozzle adjustment: continuous

Nozzle nut: Non-lockable / lockable

Spray quantity per press: 1.2 ml ± 0.1

Hose length: 100 – 280 mm

Patented aeration valve.

Large selection of standard colour combinations.

Accessories: plastic extension 20 cm
Foam nozzle

Suitable to a limited extend for transport with filled bottle.



Application fields:

Industry
Household
Gardening
Hobby
etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





Trigger Sprayer
K 4
Reusable



Novelty:
With flexible Silicon tube or Viton tube to spray overhead (360° Function)

Cap nuts for bottle thread:

28 x 4 / 16.5 mm
27 x 4 / 14.2 mm
32 x 4 / 19.7 mm

Bottleneck height:
min. 13.5 mm

Technical Data

Materials: polypropylene, polyethylene, stainless steel

Nozzle: brass nozzle: Ø 0.6 mm
other types of nozzles on request

Nozzle adjustment: continuous

Spray quantity per press: 1.2 ml ± 0.1

Hose length: 100 – 280 mm

Patented aeration valve

Large selection of standard colour combinations.

Pad printing: on the cap

Accessories: plastic extension 20 cm
Foam nozzle

Suited for transport with filled bottle to a limited extent.

Minimum order quantity:

1.000 pc.



Application fields:

Industry
Household
Gardening
Hobby
etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Trigger Sprayer
K 1
Reusable



Novelty:
With flexible Silicon tube or Viton tube to spray overhead (360° Function)

Attachment thread for bottle threads:

27 x 4 / 14.2 mm

Fixed thread nut

Bottleneck height:
min. 13.5 mm

Technical data

Materials: polypropylene, polyethylene, stainless steel, brass nozzle

Nozzle: Ø 0.6 mm
other nozzles on request

Nozzle adjustment: continuous spray quantity per press: 1.2 ml ± 0.1

Hose length: 100 – 280 mm

Patented aeration valve

Large selection of standard colour combinations

Pad printing: on the cap

Accessories: Plastic extension 20 cm
Foam nozzle

Suited for transport with filled bottle to a limited extent.



Application fields:

Industry
Household
Gardening
Hobby
etc.

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





BOTTLES &
SCREW CAPS

Bottles and Screw Caps

Photo 1 With our 19 blowers, we produce an extensive range of plastic bottles made out of HDPE, LDPE, PETG or PVC with a fill volume of up to 5000 ml as well as technical blow parts.

Photo 2 Select the right bottle shape from our extensive range. We guarantee the highest processing quality. Do you have any questions concerning available colours and special weights for the desired bottle? Our sales department will gladly assist you. Do you have special wishes concerning bottle shapes, materials or thread sizes? We are also at your service to answer these questions. Our modern and experienced in-house toolmakers' department will do its best to accommodate all your wishes.

Photo 3 We are also able to screen print plastic bottles with our modern facilities. You can use this service to make your products unique, e.g. with an imprinted label, or apply information about the product directly on the bottle. Because of the investment in a fully automatic, four-colour screen printing machine, we can print highly brilliant designs using UV-based printing inks, which will distinguish your products, setting them off even better from those of your competitors. Printed, partially photo-realistic, images, comprising up to eight individual shades of colour, can be printed excellently in very small rasters and fonts (5pt).

Photo 4 Your liquid product is bottled by another company once you receive your bottles? Now you can save these additional transport efforts, time and costs. Kläger offers you "one source service". Let us coordinate the bottle production and subsequent filling with the liquids you provide with our partner company Vema Industrie-Verpackung GmbH & Co. KG



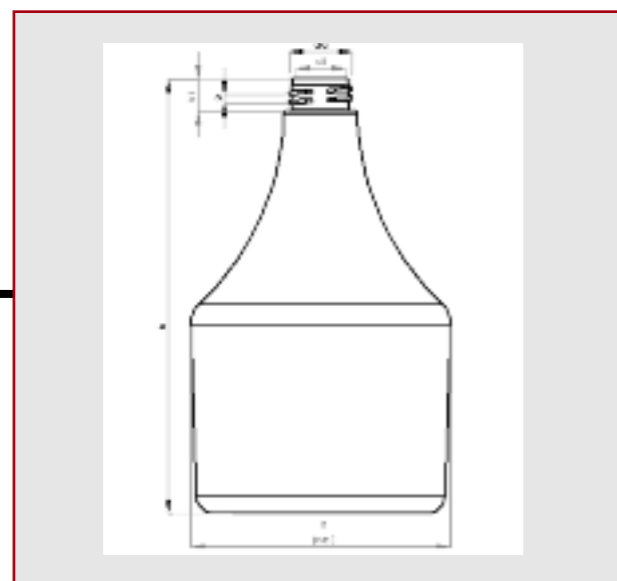


Conical Bottles
Standard HDPE

Novelty:
Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	lxb (d) mm	h mm	Weight g
KE 500	500	S 27	4	14,2±0,2	27,0-0,5	22,0±0,38	104	145,2	45 ± 5
KE 550	500	S 27	4	13,5±0,2	27,0-0,5	22,0±0,38	104	155,0	50 ± 5
KE 550	500	Rd 28	4	14,2±0,2	28,0-0,5	22,0±0,38	104	155,7	50 ± 5
KE 1000	1000	Rd 27	4	14,2±0,2	27,0-0,5	21,0±0,38	115	195,5	70 ± 5
KE 1000	1000	S 28	4	11,7±0,2	27,5±0,2	21,0±0,38	115	192,0	70 ± 5
KE 1010	1000	Rd 27	4	14,2±0,2	27,0-0,5	21,0±0,38	115	192,2	70 ± 5
KE 1010	1000	Rd 28	4	14,2±0,2	28,0-0,5	21,5±0,38	115	192,2	70 ± 5
KE 600 PETG	600	S 27	4	14,2±0,2	27,0-0,5	21,5±0,38	100x86	160,0	60 ± 5

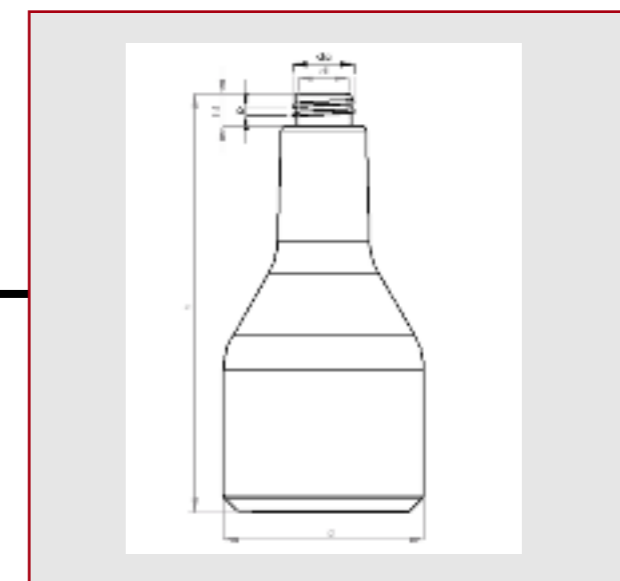


Long-neck Bottles
Standard HDPE/PETG

Novelty:
Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
LH 350	350	S 27	4	13,5±0,2	27-0,5	20,6±0,38	71	161,5	32±3
LH 350	350	S 28	4	11,7+0,4	27,5±0,2	21,0±0,38	71	159,7	32±3
LH 350	350	S 28/collar	4	20,3±0,2	27,5±0,2	21,0±0,38	71	168,3	30±2
LH 500	500	S 27	4	14,2±0,2	27-0,5	22,0±0,38	88	182,7	40±5
LH 500	500	S 28/raster	3	16,5+0,5	28-0,5	22,0±0,38	88	185,0	40±5
LH 500	500	S 28	4	11,7+0,4	27,5±0,2	21,0±0,38	88	180,2	50±5
LH 500	500	S 28	4	16,5±0,2	27,5±0,2	21,8±0,38	88	185,0	45±5
LH 500	500	S 28	4	16,5+0,5	28-0,8	22,4-0,25	88	185,0	40±5



Novelty:
LH 500 HDPE with window strip to indicate liquid level

Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)

Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)

Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





Cylindrical Bottles
Standard HDPE

Novelty:
Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl 500	500	S 27	4	13,5 ± 0,2	27,0-0,5	20,0 ± 0,38	75	152	40 ± 3
Zyl 500	500	S 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	75	155	40 ± 3
Zyl 500	500	S 28 / raster	3	16,5 + 0,5	28,0-0,5	22,0 ± 0,38	75	155	40 ± 3
Zyl. 500 H	500	Rd 25	3	14,7 ± 0,2	25,0-0,5	19,5 ± 0,1	61	230	40 ± 3
Zyl. 500 H	500	S 27	4	14,2 ± 0,2	27,0-0,4	20,5 ± 0,38	61	230	40 ± 3
Zyl. 500 H	500	S 28 / raster	3	16,5 + 0,5	28,0-0,5	22,0 ± 0,38	61	231,5	40 ± 3
Zyl. 500 H	500	S 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	61	232	40 ± 3
Zyl. 500 H	500	S 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	61	232	60 ± 3
Zylk 510	500	Rd 27	4	14,2 ± 0,2	27,0-0,5	22,0 ± 0,38	75	161	40 ± 3
Zylk 510	500	S 28	4	11,7 ± 0,2	27,5 ± 0,2	21,0 ± 0,38	75	159	40 ± 3
Zylk 510	500	S 28	4	14,2 ± 0,2	28,0-0,5	21,0 ± 0,38	75	161,5	40 ± 3
Zylk 510	500	Rd 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	75	163	40 ± 3
Zylk 510	500	S 28 / raster	3	16,5 + 0,5	28,0-0,5	22,0 ± 0,38	75	164	40 ± 3
Zylk 510 PET-G	500	S 28 / raster	4	16,5 + 0,5	28,0-0,5	19,7 ± 0,38	77	163,8	50 ± 3
Zylk 600	600	Rd 27	4	14,2 ± 0,2	27,0-0,5	20,2 ± 0,38	80	176	60 ± 5
Zyl 750	750	Rd 27	4	14,2 ± 0,2	27,0-0,5	21,0 ± 0,38	85	180	48 ± 4
Zyl 1000	1000	Rd 25	3	14,7 ± 0,2	25,0-0,5	19,5 ± 0,1	85	221	55 ± 5
Zyl 1000	1000	S 27	4	14,2 ± 0,2	27,0-0,5	22,0 ± 0,38	85	220	55 ± 5
Zyl 1000	1000	S 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	85	222	55 ± 5
Zyl 1000	1000	S 28	3	15,3 ± 0,2	28,0-0,5	21,0 ± 0,38	85	220	55 ± 5
Zyl 1000 H	1000	Rd 27	4	14,2 ± 0,2	27,0-0,5	21,0 ± 0,38	80	259	55 ± 5
Zyl 1000 H	1000	Rd 28	4	16,5 + 0,5	28,0-0,5	22,4-0,25	80	261	55 ± 5
Zyl 1000 H	1000	S 28 / raster	3	16,5 + 0,5	28,0-0,5	22,0 ± 0,38	80	262	55 ± 5

Cylindrical Bottles
Standard HDPE/PETG

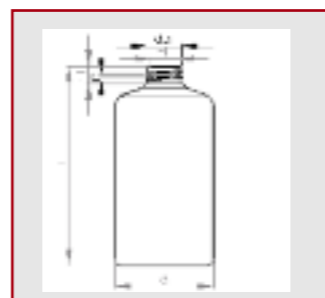


Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl. 200-3 PET-G	200	S 28	4	11,7 + 0,4	28-0,5	22,4-0,25	55,0	120,0	20,0 ± 2
Zyl. 200-3 PET-G	200	S 28	4	14,2 ± 0,2	28-0,5	22,4-0,25	55,0	122,5	20,0 ± 2
Zyl. 200-3 PET-G	200	S 28	4	16,5 + 0,5	28-0,5	22,4-0,25	55,0	124,8	20,0 ± 2
Zyl. 200-3 HDPE	200	S 27	4	14,2 ± 0,2	27-0,5	21,0 ± 0,38	54,5	121,5	20,0 ± 2
Zyl. 200-3 HDPE	200	S 28	4	16,5 + 0,5	28-0,5	22,4-0,25	54,5	123,8	20,0 ± 2
Zyl. 500-3 PET-G	500	S 27	4	14,2 ± 0,2	27-0,5	21,0 ± 0,38	69,5	179,5	40,0 ± 3
Zyl. 500-3 PET-G	500	S 28	4	11,7 + 0,4	28-0,5	22,4-0,25	69,5	179,5	40,0 ± 3
Zyl. 500-3 PET-G	500	S 28	4	14,2 ± 0,2	28-0,5	22,4-0,25	69,5	182,0	40,0 ± 3
Zyl. 500-3 PET-G	500	S 28	4	16,5 + 0,5	28-0,5	22,4-0,25	69,5	184,3	40,0 ± 3
Zyl. 500-3 HDPE	500	S 27	4	14,2 ± 0,2	27-0,5	20,0 ± 0,38	68,5	179,4	40,0 ± 3
Zyl. 500-3 HDPE	500	S 28	4	16,5 + 0,5	28-0,5	22,4-0,25	68,5	181,7	40,0 ± 3

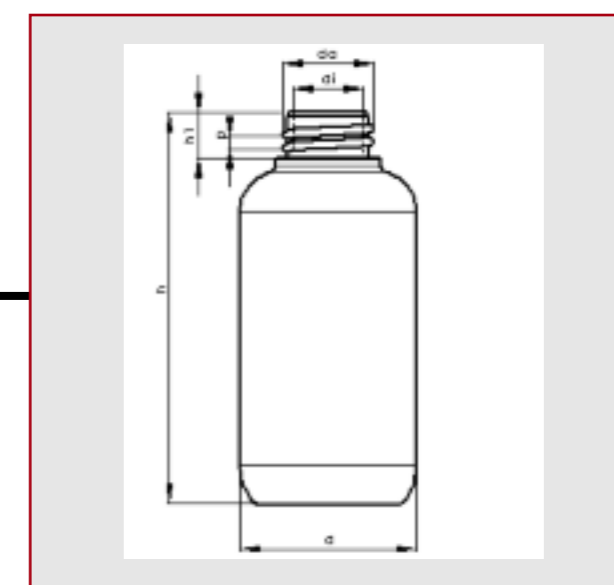
Novelty:
Zyl.1000H HDPE with window strip to indicate liquid level



Novelty:
Imprint of a tactile hazard symbol (all bottle types)



Novelty:
Imprint of a tactile hazard symbol (all bottle types)



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

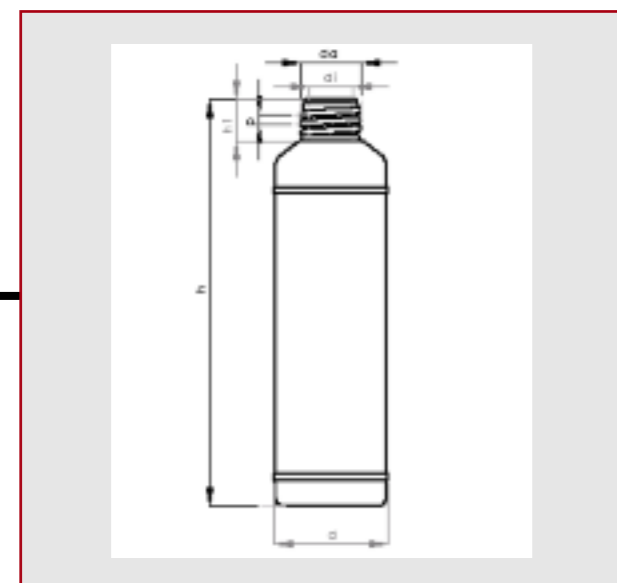
Technical changes reserved.
Status: March 2014





Cylindrical Bottles
Standard PETG

Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl 20 PETG	20	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28,5	57,0	4,0±0,3
Zyl 25 PETG	25	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28,5	66,0	4,5±0,3
Zyl 30 PETG	30	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28,5	75,0	5,0±0,3
Zyl 50 PETG	50	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	36,0	82,0	7,0±1,0
Zyl 75 PETG	75	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	36,0	102,0	8,0±1,0
Zyl 100 PETG	100	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	36,0	135,5	10,0±1,0
Zyl 250 PETG	250	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	50,0	172,7	20,0±1,0



Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)



Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)

Cylindrical Bottles
Standard HDPE

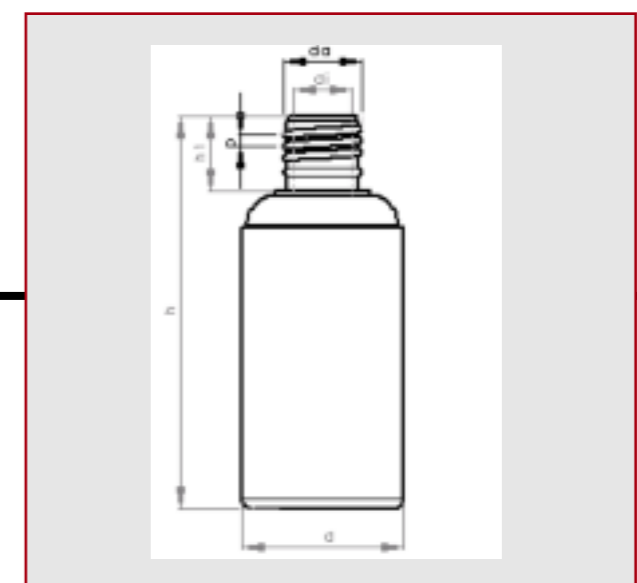
Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



suitable for fingertip sprayer S-1 (see picture above left)

Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl. 100-1	100	Rd 22	3,17	21,0-0,3	21,64±0,25	16,0±0,38	44,7	109,00	12 ± 1
Zyl. 125-1	125	Rd 22	3,17	21,0-0,3	21,64±0,25	16,0±0,38	44,7	125,00	13 ± 1
Zyl. 150-1	150	Rd 22	3,17	21,0-0,3	21,64±0,25	16,0±0,38	44,7	129,45	15 ± 1
Zyl. 200-1	200	Rd 22	3,17	21,0-0,3	21,64±0,25	16,0±0,38	50,0	149,00	20 ± 1
Zyl. 250-1	250	Rd 22	3,17	21,0-0,3	21,64±0,25	16,0±0,38	50,0	175,00	20 ± 1



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



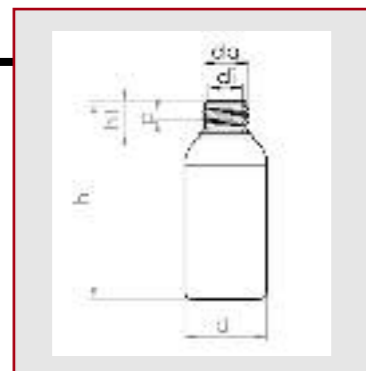


Cylindrical Bottles
Standard HDPE/PETG

Novelty:
Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl. 50-2	50	S 18	3	16,0±0,2	18-0,4	14,0±0,1	35	87,8	7±1
Zyl. 50-2	50	S 20	3	14,2±0,2	20-0,4	14,0±0,1	35	86	7±1
Zyl. 75-2	75	S 20	3	14,2±0,2	20-0,4	14,0±0,1	35	102	8±1
Zyl. 100-2	100	S 20	3	14,2±0,2	20-0,4	14,0±0,1	44,7	110	12±1
Zyl. 100-2	100	S 20	3	14,2±0,2	20-0,4	14,0±0,1	44,7	110	15±1
Zyl. 125-2	125	S 18	3	16,0±0,2	18-0,4	14,0±0,1	44	117,5	13±1
Zyl. 125-2	125	S 20	3	14,2±0,2	20-0,4	14,0±0,1	44	115,5	13±1
Zyl. 150-2	150	S 20	3	14,2±0,2	20-0,4	14,0±0,1	44	132,0	15±1
Zyl. 200-2	200	S 20	3	14,2±0,2	20-0,4	14,0±0,1	50	150,0	16±2
Zyl. 250-2	250	S 20	3	14,2±0,2	20-0,4	14,0±0,1	50	175,2	25±2
Zyl. 300-2	300	S 20	3	14,2±0,2	20-0,4	14,0±0,1	53,7	176,8	24±2
Zyl. 500-2	500	S 20	3	14,2±0,2	20-0,4	14,0±0,1	60,5	230	45±3
Zyl. 50-2 PETG	50	S 20	3	14,2±0,2	20-0,4	14,0±0,1	36	87	7±1
Zyl. 75-2 PETG	75	S 20	3	14,2±0,2	20-0,4	14,0±0,1	36	103	8±1
Zyl. 100-2 PETG	100	S 20	3	14,2±0,2	20-0,4	14,0±0,1	36	111	12±1
Zyl. 125-2 PETG	125	S 20	3	14,2±0,2	20-0,4	14,0±0,1	45	117	13±1
Zyl. 150-2 PETG	150	S 20	3	14,2±0,2	20-0,4	14,0±0,1	45	133,3	15±1
Zyl. 200-2 PETG	200	S 20	3	14,2±0,2	20-0,4	14,0±0,1	50,5	152,3	20±2



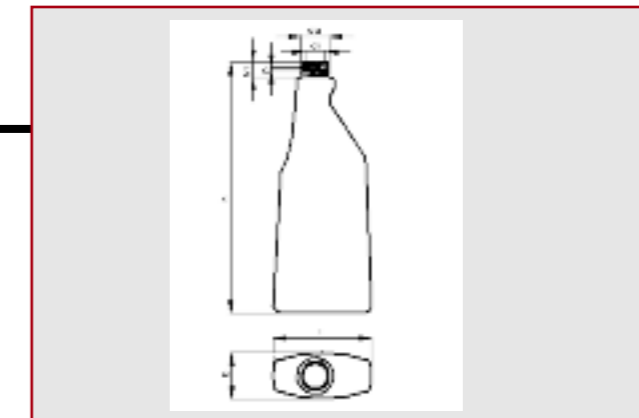
Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)



Novelty:
FL 500 HDPE with window strip to indicate liquid level



Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	lxb mm	h mm	Weight g
FF 500	500	S 27	4	14,2±0,2	27,0-0,5	21,2±0,38	94x43,5	240	45±3
FF 500	500	S 28	4	11,7+0,4	27,5±0,2	21,0±0,38	94x43,5	237,5	45±3
FL 500	500	S 27	4	14,2±0,2	27,0-0,5	22,0±0,38	104x48	196,0	45±3
FL 500	500	S 28	4	11,7+0,4	27,5±0,2	21,0±0,38	100x48	193,7	45±3
FL 500	500	S 28	4	16,0±0,2	28,0-0,5	22,0±0,38	100x48	198,0	45±3
FL 500	500	S 28 / raster	3	16,5+0,5	28,0-0,5	22,0±0,38	104x48	198,5	45±3



Flat Bottles
Standard HDPE

Novelty:
Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014





Conical Bottles
Standard PETG



PVK 50 with fine mist sprayer MVI



PVK 30 with Mini Dispenser Pump M 300



PVK 700 with Closure Cap

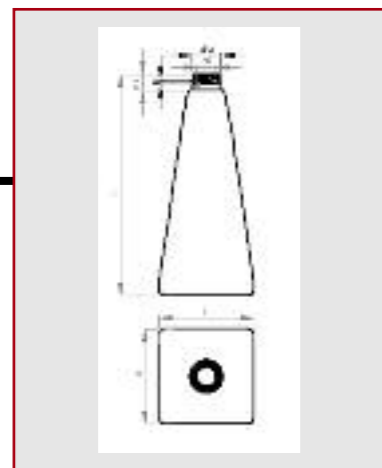


PVK 700 with Sprayer K-1

Technical Data

Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
PVK 30	30	S 20	3	14,2±0,2	20-0,4	14,5±0,34	31,7x31,7	66,40	8,0±1,5
PVK 50	50	S 20	3	14,2±0,2	20-0,4	14,5±0,34	36,7x36,7	85,20	10,0±2,0
PVK 500	500	S 27	4	14,2±0,2	27-0,5	18,5±0,38	79,6x79,6	174,8	55,0±2,0
PVK 700	700	S 27	4	14,2±0,2	27-0,5	17,5±0,38	88,0x88,0	203,5	77,0±2,0

Packaging units: PVK 500: 204 pc. / box ; PVK 700: 180 pc. / box Standard colours: red, green, blue, orange, transparent



PVK 500 + PVK 700 (Pyramide Bottles)

Cylindrical Bottles
Standard HDPE

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



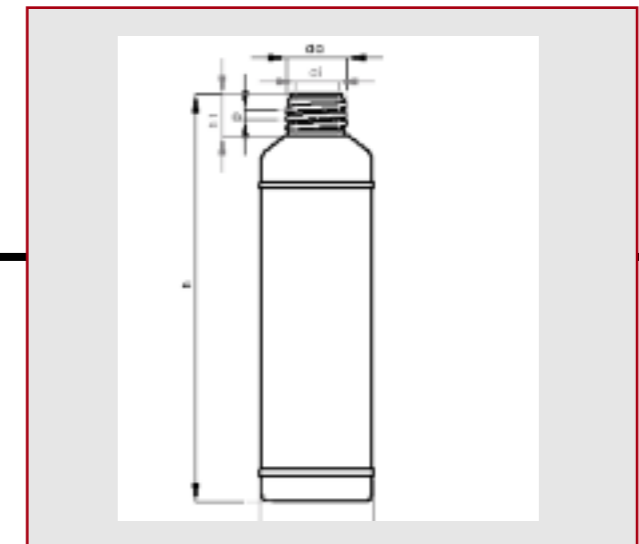
Technical Data

Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
Zyl 20	20	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28	56	4,0±0,3
Zyl 25	25	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28	65	4,5±0,3
Zyl 30	30	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	28	73,5	5,0±0,3
Zyl 50	50	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	35	81	7 ± 1
Zyl 75	75	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	36	101	8 ± 1
Zyl 100	100	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	37	134	10 ± 1
Zyl 100	100	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	37	134	15 ± 1
Zyl 100	100	S 18	3	16,0±0,2	18,0-0,4	14,0±0,1	37	137,8	10 ± 1
Zyl 250	250	S 20	3	14,2±0,2	20,0-0,4	14,0±0,1	50	173	20 ± 2
Zyl 250	250	S 25	3	14,7±0,2	25,0-0,5	19,5±0,1	50	173	20 ± 2
Zyl 250	250	S 27	4	14,2±0,2	27,0-0,5	21,0±0,38	50	173	20 ± 2
Zyl 250	250	S 28	4	16,5±0,5	28,0-0,5	22,4-0,25	50	175	20 ± 2
Zyl 250	250	S 28	4	18,0±0,2	28,0-0,5	21,6-0,2	50	176,5	20 ± 2



Novelty:

Imprint of a tactile hazard symbol (all bottle types)



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Square Bottles
Standard HDPE

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	lx mm	h mm	Weight g
VK 100	100	Rd 20	3	14,2±0,2	20,0-0,4	14,0±0,1	42x35	101	9±2
VK 100	100	Rd 25	3	14,7±0,2	25,0-0,5	19,5±0,1	42x35	101,5	9±2
VK 100	100	S 28	4	11,7±0,4	27,5±0,2	21,8±0,38	42x35	98,5	9±2
VK 250	250	Rd 25	3	14,7±0,2	25,0-0,5	19,5±0,1	60x46	131,7	20±3
VK 250	250	Rd 27	4	14,2±0,2	27,0±0,5	21,0±0,38	60x46	131,2	20±3
VK 250	250	Rd 28	4	14,2±0,2	28,0-0,5	21,2±0,38	60x46	131,2	20±3
VK 250	250	S 28	4	11,7±0,4	27,5±0,2	21,2-0,38	60x46	128,7	20±3
VK 250	250	S 28	4	16,5±0,5	28,0-0,5	22,4-0,25	60x46	133,5	20±3
VK 500	500	Rd 25	3	14,7±0,2	25,0-0,5	19,5±0,1	74x58	163,5	35±3
VK 500	500	Rd 27	4	14,2±0,2	27,0-0,5	21,0±0,38	74x58	163,0	35±3
VK 500	500	S 28	4	14,2±0,2	28,0-0,5	22,0±0,38	74x58	163,0	35±3
VK 500	500	S 28	4	16,5±0,5	28,0-0,5	22,4-0,25	74x58	165,3	35±3
VK 750	750	Rd 27	4	14,2±0,2	27,0-0,5	21,0±0,38	86x70	190,0	50±5
VK 750	750	S 28	4	16,5±0,5	28,0-0,5	22,4-0,25	86x70	192,3	50±5
VK 1000	1000	Rd 28	4	14,2±0,2	27,5±0,2	21,5±0,38	86x69	230,2	60±5
VK 1000	1000	Rd 28	4	14,8±0,2	27,5±0,2	21,5±0,38	86x69	230,8	60±5
VK 1000	1000	Rd 27	4	14,2±0,2	27,0±0,5	21,0±0,38	86x69	230,2	60±5
VK 1000	1000	S 28	4	16,5±0,5	28,0-0,5	22,4-0,25	86x69	232,5	60±5



Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)



Novelty:
Imprint of a tactile hazard symbol acc. DIN ISO 11683 (all bottle types)

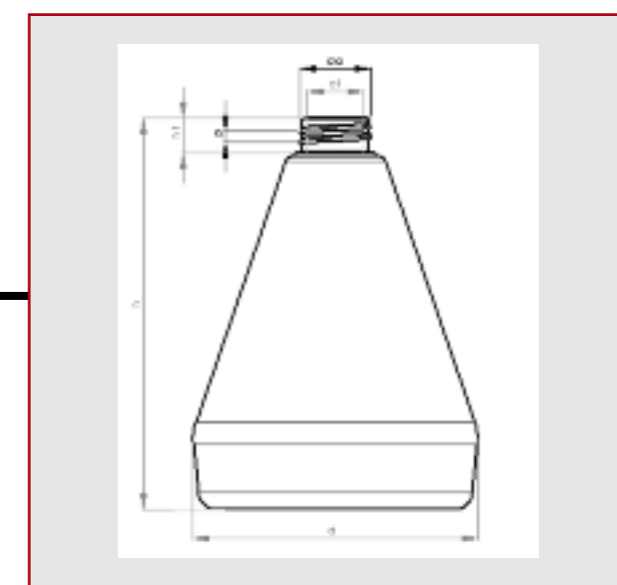
Conical Bottles
Standard HDPE

Novelty:

Our whole range of HDPE bottles is also available made of 100% bio-based plastic granules



Technical Data									
Nominal Volume	Content ml	Thread mm	p mm	h ₁ mm	da mm	di mm	d mm	h mm	Weight g
KE 510	500	S 27	4	14,2±0,2	27,0-0,5	20,5±0,38	95	147	40±3
KE 530	500	Rd 27	4	13,5±0,2	27,0-0,5	20,5±0,38	102	142	40±3
KE 650	650	S 27	4	14,2±0,2	27,0-0,5	20,5±0,38	109	150	45±3
KE 1100	1000	S 27	4	14,2±0,2	27,0-0,5	20,5±0,38	120	207	70±5



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



Screw Caps



Technical Data

- 1. 20 mm with PE seal
- 2. 25 mm with PE seal
- 3. 27 mm with PE seal
- 4. 28 mm with PE seal
- 5. 28 mm with induction seal inlay*
- 6. 18 mm dripping insert cap
- 7. 25 mm dripping insert cap
- 8. 20 mm splash insert cap with spout and cap
- 9. 27 mm splash insert cap with spout and cap
- 10. 28 x 4 / 16,5 mm child proof / tamper proof cap
- 11. 27 mm safety cap
- 12. 50 mm cap for compressed air sprayer Profi / Hobby / Vario (childproof)
- 13. 28 x 4 / 18,0 mm Retractable Hinge Closure Suitable for Bottle Zyl. 250 / 500H / 1000H + VK 250
- 14. 27 mm with PE seal (ventilated)
- 15. 20 mm child proof / tamper proof cap



Colour and special designs available on request!

Technical changes reserved.
Status: March 2014



FINGERTIP
SPRAYERS



Fingertip-Sprayers
M VII
S I

Do you want to distribute your liquid product in small volume plastic bottles from 20 ml to max. 250 ml?

Then we would like to recommend our fingertip sprayers.

Technical data

M VII (thread 20 mm) generates a very fine mist.

Thread seal/transport-proof incl. protection cap
Spray quantity per press: 0.21ml +/- 0.05

*Matching bottles for M VII:
Bottles from 20 to 250 ml

From now on MV II is also available in black colour!

S I (DIN 22)

Generates a very fine mist.

Thread seal/transport-proof incl. protection cap
Spray quantity per press: 0.15 ml +/-0.05

Matching bottles for S I: *
Zyl 100-1/125-1/150-1/200-1/250-1

*See catalogue "Bottles"



Application fields :

Cosmetics
Technology
Domestic
etc.

Coloured and special designs available on request!

Technical changes reserved.
Status: March 2014



Dispenser
B-AV 200Z

You want to distribute your viscous product in small volume plastic bottles from 20 ml to max. 100 ml?

Do you want to distribute sample bottles? - Then our dispenser pump B-AV 200Z is the ideal solution.



Application fields :

Cosmetics
Technology
Domestic
etc.

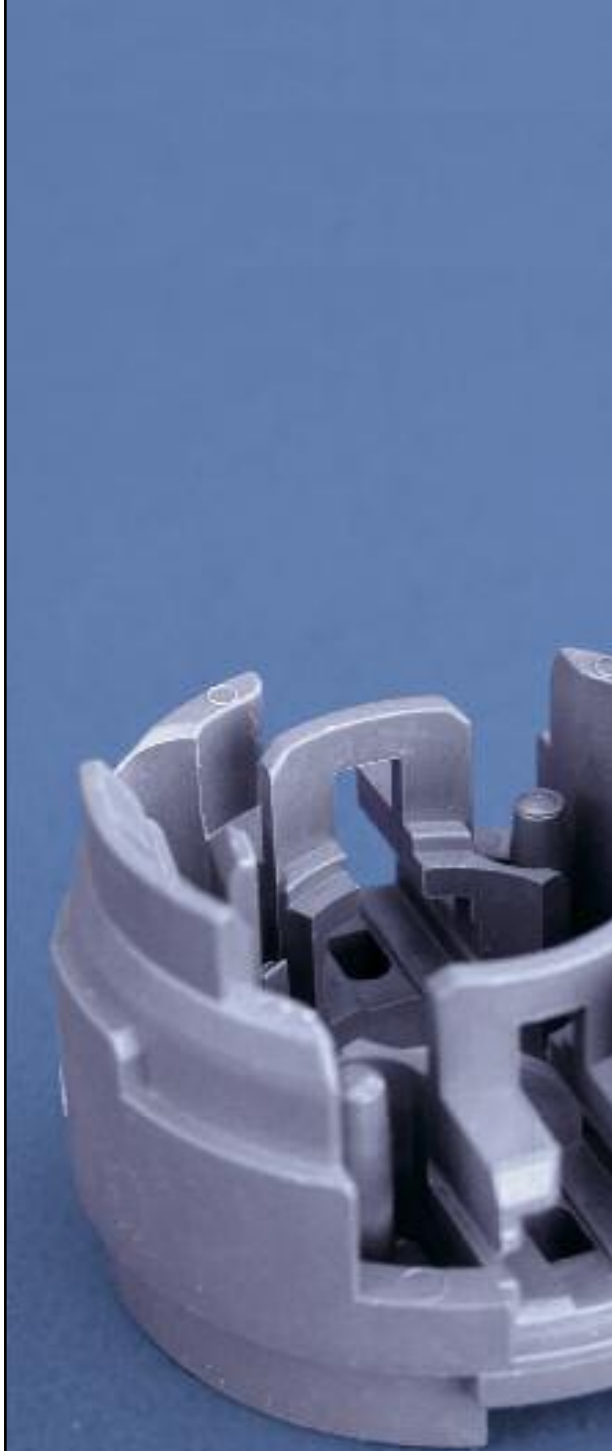
Technical data
B-AV 200Z (thread 20 mm)
Suited for small volume dispensing of various viscous liquids like creams, lotions, etc.
Protection cap (transparent) included.
Output: approx 0.18 ml/push
Matching bottles:
Zyl 20/25/30/50 (see photo on the left)
or Zyl. 75/100/50-2/75-2/100-2/VK 100 (see Catalogue "Bottles")



Coloured and special designs available on request!

Technical changes reserved.
Status: March 2014





DEVELOPMENT | MOULDS
PLASTIC TECHNOLOGY

Development/Mouldmaking
Plastic Technology

Welcome to our factory in Hartha / Saxony !

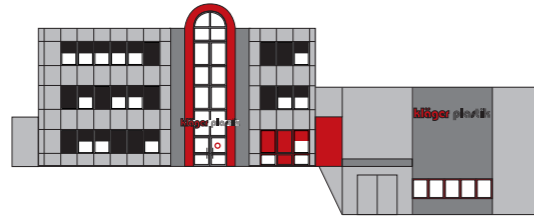


Image 1+2+3 The business was founded in 1992 to ensure the supply of plastic injection-moulding parts for sprayer production at the main plant in Neusäss. However, it soon became apparent that Kläger Plastik GmbH in Hartha was gaining a reputation among other companies as a reliable partner for the production of complex technical plastic parts and assemblies.

Image 4 In 2000 the company responded to this increased demand for its services by opening a new production facility. Marking the start of a new chapter in the development of the family-owned company Kläger Plastik, the new plant boasted cutting-edge production technologies and was operated by highly trained staff.

Image 5+6 The production and testing equipment for the new plant were supplied by prestigious firms including Krauss Maffei, Arburg, Studer, Jung, AGIE and Zeiss.

Image 7 Our technical capacity is demonstrated by our current fleet of 19 modern injection-moulding machines. In addition to all common technical plastics, the plant is especially well equipped to process PPS materials.

Image 8 In addition, the plant was expanded to encompass the production of technical blow-moulded parts with a fill volume of up to 5 liters.



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In addition to the medical and electrotechnology sectors, specific target groups include the chemical and cosmetics industries and especially the automotive sector.

Our finished products are of the highest standard in terms of quality and precision to meet the high demands of this sector in particular (DIN EN ISO 9001:2008), as well as the provisions of the environmental standard DIN ISO 14001.

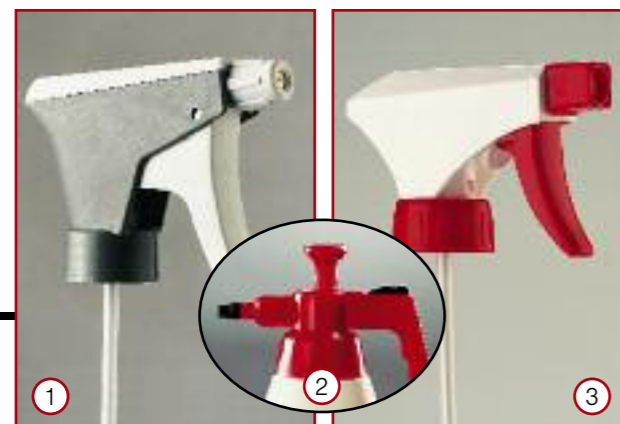


Image 1+2 We can respond to your demands quickly and flexibly, supported by our development and construction department, which prepares your project using 3D CAD data, and our modern toolmaking and mouldmaking, which implements these plans with consummate professionalism.

This work is performed by our highly trained staff, all of whom have many years of experience, using modern production procedures such as

- Image 3** Wire EDM
- Image 4** Die-sinking EDM
- Image 5** Precision grinding

Image 6 All this - and especially our qualified and highly-motivated team - means you can relax in the knowledge that you could not be in better hands.





CONTRACT PACKAGING





Medical Products

Aerosols with propellant
 Aerosols without propellant
 Liquids
 Liquid bandages
 Disinfectants
 Veterinary preparations

Cosmetics

Body and foot sprays
 Roll-on deodorants
 Deodorant sprays
 Hair care
 Conditioners
 Hairsprays
 Hair setting lotions
 Hair shampoos
 Hair mousse
 Men s cosmetics
 Aftershave
 Preshave
 Shaving foam
 Toilet water
 EDT, EDP, EDC
 Perfume sprays
 Cosmetic care products
 Lotions
 Creams
 Bath cosmetics
 Shower and foam baths
 Sports cosmetic care products

Technology

Corrosion protection
 Lacquer care
 Lacquer preservation
 Indoor cleaning agents
 Plastics cleaning agents
 Glass cleaning agents
 Rubber cleaning agents
 Aluminium and zinc sprays
 Waxes
 Additives
 Car sprays
 Separation agents
 Paints and lacquers
 Electronics sprays
 Technical cleaning agents
 Silicone sprays
 Hand protection sprays
 Soldering agents
 Welding agents
 Antistatic agents
 Marking sprays
 Lubricants

Household

Cleaning agents
 Detergents
 Cleaning additives
 Room sprays
 Grill and oven cleaners
 Stain removers
 Toilet cleaning agents
 Glass cleaner
 Tile cleaner
 Prewash sprays
 Carpet cleaners
 Impregnating agents
 Shoe care
 Textile care
 Camping and leisure
 Animal care products
 Plant care products
 Furniture care products
 Liquid soaps



Service program

- Research and development in our own laboratory
- Production of solutions, emulsions, creams, etc.
- Filling and batching of liquids, creams, lotions and aerosols in tins, bottles, jars, canisters, pump sprays and dosing sprays
- Acquisition of packaging materials and raw materials on customer order only. No own products
- Cosmetics production acc. to GMP + IFS HPC Standard
- Accompanying microbiological examination on request

Quality Management

- Quality management system acc. to DIN EN ISO 9001 : 2008
- Filling of pharmaceutical products acc. AMG + ISO 13485
- Microbiological examination of raw materials, batches and finished products in our own laboratory



Additional Service

- Purchasing all components for the production
- Development of formulas acc. to specifications
- Filling of sample batches for test purposes
- Preparation of safety data sheets

KLÄGER PLASTIK HARTHA

Entwicklung und Konstruktion
Werkzeug- und Formenbau
Technisches Spritzgießen
Baugruppenmontage

kläger group

KLÄGER PLASTIK NEUSÄSS

Druckpumpzerstäuber
Handsprühsysteme
Kunststoffflaschen
UV-Siebdruck

VEMA NEUSÄSS

Produktentwicklung
Bulk-Herstellung
Lohnabfüllung von
Aerosolen und
Flüssigkeiten
Konfektionierung
und Logistik

Technische Änderungen und Weiterentwicklungen vorbehalten. Keine Haftung für Druckfehler.



Kläger Plastik GmbH
Zentrale Neusäss

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DIN ISO 14001

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**Vema Industrieverpackung
GmbH & Co. KG**

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DIN ISO 13485
DIN ISO 22716 (Kosmetik-GMP)
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Kataloghülle Kläger Group