# sensoplast® closing devices



Reliable

SCREW CAPS

AND DOSING SYSTEMS

FROM THE LAND OF POETS, THINKERS AND BREWERS

## 100% MADE IN WESTERWALD





You can click products, buttons or page numbers in the document to navigate this PDF.
Go on a discovery tour and find your desired product in just a few clicks.

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We stay in touch .....









OH, YOU LOVELY WESTERWALD

The year is 1988. With the simple idea, to offer plastic closures of high quality and short delivery times, Rainer Busch and Klaus Schweitzer started a two-man business in a former carpenter's atelier in Sensenbach.

The machine park consisted of only three injection-molding machines and the production of only two items: The tamper-evident cap/TE1 in black (see page 19) and the Uni 2 horizontal dropper (see page 41).

This screw-cap system proved convincing and a short time later an intermediate storage facility had to be set up in Niederwambach, three kilometers away, as well as other warehouses in Altenkirchen, to be able to process the ordered capacities.

With their personalities the two founders have always lived our company philosophy and thus created a trusting relationship with our customers.

Without defining the core meaning of this philosophy they did a professional job and put all their powers into this enterprise. Therefore it was already foreseeable after a short time that there was not enough space for the production of the highly demanded SENSOPLAST® products. The new main location in Oberhonnefeld was established in 1998 by purchasing a hall, which had to be extended just three years later.

#### A milestone for SENSOPLAST®

An important step towards even more professionalism was marked by our ISO certifications in 2010, which allowed us to officially prove that our standards meet the highest requirements and that our products are manufactured under hygienic conditions.

In addition, in 2009 we purchased an administrative building that housed the beginnings of our charming sales team which is one of our current service pillars.

Less than five years later, this location no longer offered sufficient floor space either and SENSOPLAST® expanded to Daufenbach, with a state-of-the-art new building: our energy-efficient, 2,500 sqm service and logistics center. After another two years, an assembly center of more than 4,000 sqm with a state-of-the-art component warehouse was built alongside this building.

In less than 35 years, thanks to the power of our longstanding employees, we have succeeded in establishing a family-run company in the market, permanently exhausting our production capacities and increasing them every year.

From three injection-molding machines and one product to a machine park of more than 50 injection-molding machines and 20 state-of-the-art automatic assembly machines that produce a range of more than 1200 articles at a speed that is invisible to the naked eye.

The signs continue to point to growth, so that we can continue to be your partner and provide you with active and flexible support.

We manufacture 24 hours a day, seven days a week and supply you worldwide with real quality "Made in Westerwald".

We work with professionalism, personality and power. We are SENSOPLAST®, we care.

FRANK BUSOH, MANAGING DIRECTOR





#### IK Initiative - Zero Granulate Loss

We are aware of our responsibility as a plastics processor in connection with our sensitive ecosystem. Therefore, it is a personal concern of ours to prevent the loss of plastic granulate along the entire supply chain and we joined the worldwide initiative "Zero Granulate Loss". Even though the percentage of the raw material plastic granulate that ends up in the environment is very small, we want to do everything we can to preserve the beautiful landscapes for our children.



#### **GKV-Code of Conduct**

(German Plastics Processing Industry Association)

As a member of the GKV, we assume social responsibility and act in accordance with the GKV Code of Conduct, which defines standards for fair and sustainable dealings with suppliers, customers and company employees. Standards for consumer protection are observed, as is the duty of care for environmental protection and the pursuit of environmentally friendly production methods. This also results in the responsible use of our resources.

#### OUR WAY TO DEAL WITH RESOURCES

Our self-declared goal is to produce in a climate-neutral manner in the long-term. To achieve this, we set ourselves verifiable targets and objectives. We work exclusively with high-quality, single-variety plastic granules that are 100% recyclable and can be returned to the production cycle. In addition, they have the appropriate approvals for pharmaceutical and food contact.

Surplus components generated in our production are professionally re-granulated and fed into the processing cycle of partner companies.

As part of our corporate activities, we assume responsibility for current and future generations in our rural region in the middle of the Rhine-Westerwald Nature Park and are committed to preserving this beautiful landscape.

For this reason, we rely on renewable energies and power generation from our own energy sources of our photovoltaic systems. We use the self-generated electricity in a resource-saving way not only for our production machines and hall lighting, but also for the use of electric company cars, e-bikes and e-scooters for our employees. In addition, we use the excess heat from our production machines to heat our buildings. Through the use of the latest technologies as well as the conscious use of our resources, we want to be a role model for our immediate environment, regional suppliers, business partners and our employees and encourage them to follow suit.

For a future that is worthwhile - we care.



Recyclable materials



Electricity from our own photovoltaic



Room heating by excess heat



LED lighting



E-company car



E-bike leasing for employees











#### SPEED AND HYGIENE STANDARDS

increasingly difficult for manufacturing companies to process the required output. With intelligent process sequences and the latest technology, our production is fully geared to speed and the highest standards of hygiene. With specially designed assembly machines, we achieve maximum output.

Fast. Precise. Efficient. A camera-supported system monitors the production process and also removes resources.

Rising output speeds and volumes are making it any defective parts fully automatically. Clean, safe and hygienic, we process only high-quality plastic granules with pharmaceutical approval. These are of course also suitable for contact with foodstuffs.

> Our "zero granulate loss" principle ensures a 100 percent recycling rate for the plastic materials generated in production. At the same time, we minimize production emissions for responsible and sustainable use of

#### PROVEN QUALITY STANDARDS

Our quality management meets the requirements of the globally applicable standards: DIN EN ISO 9001 and DIN EN ISO 15378. Our predominantly international customers can be assured at all times of the production, assembly and packaging of primary packaging materials under controlled quality conditions, which are demanding from a process and hygiene point of view.

In addition, we meet our own, far stricter quality requirements. The core of our system is our quality manual, in which we have documented all production-relevant processes down to the last detail. We ensure seamless batch tracking of all manufactured components throughout the entire value chain. At various points in the production process, all components and the end product are carefully inspected by our quality assurance department.

All test results are available in the form of a detailed quality certificate. They meet the high quality requirements for pharmaceutical primary packaging materials. Production, assembly and packaging are carried out under hygienically perfect conditions. We base our quality assessment on the following recommendations:

- · World Health Organization (WHO)
- · Good Manufacturing Practice (GMP)
- · ECV Editio Cantor Verlag für Medizin und Naturwissenschaften GmbH, Aulendorf

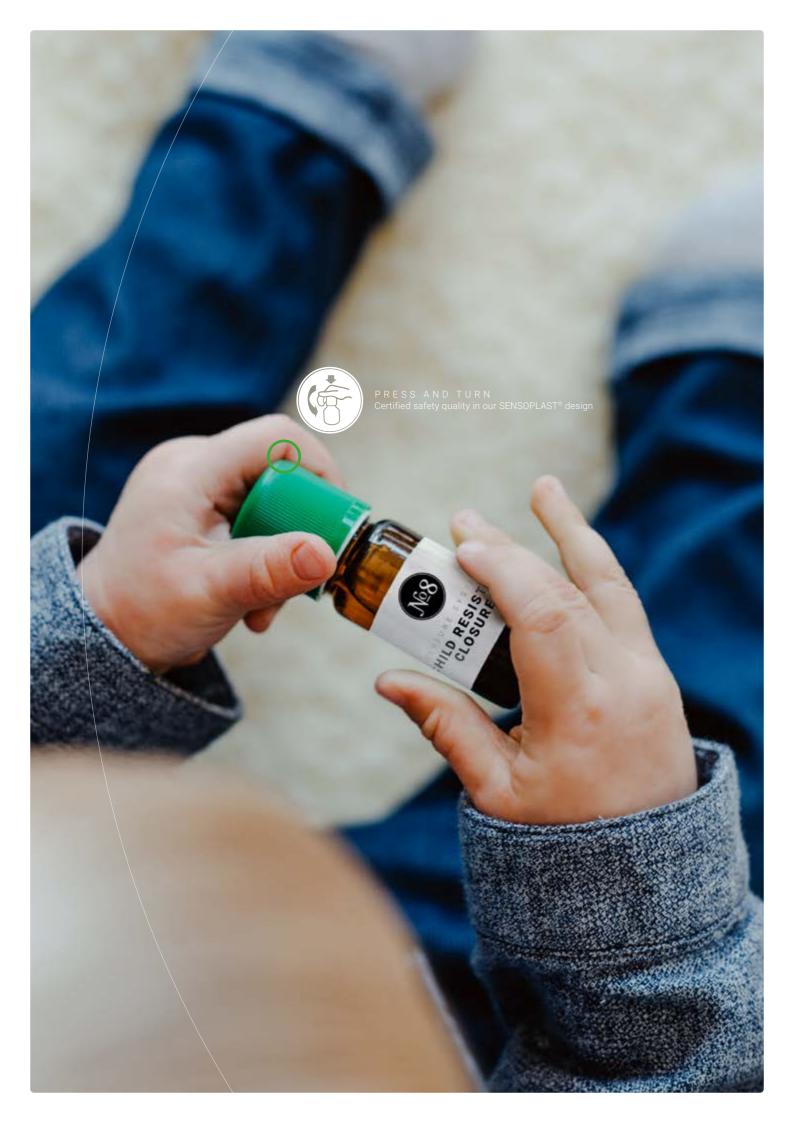
(publications of the respectively valid error evaluation lists for injection-molded plastic parts: closures, sealing inserts, dosing aids, droppers, etc.)

#### CERTIFICATES DIN EN ISO 9001 & DIN EN ISO 15378 -





Scope: Development, production and distribution of pharmaceutical primary packaging material





#### CHILD-RESISTANT CLOSURES

Never before in the history of mankind has it been possible to detect, treat and cure so many different diseases at an early stage. One drug can mean a better quality of life for one person. For children, however, the same dose can become life-threatening in the worst case.

That's why at SENSOPLAST® we develop child-resistant closures that prevent young children from coming into contact with the contents. Our screw caps can be opened easily by adults and therefore also meet the needs of older people. No easy task. But one that we are happy to take on.

All SENSOPLAST® child-resistant closures are certified according to DIN EN ISO 8317 and US 16 CFR § 1700.20.

This international standard for re-closable, child-resistant packaging is used for both pharmaceutical and chemical-technical products. Only packaging that proves equally child-resistant in tests with small children and suitable for senior citizens meets the requirements of the standard.

Our solution: We mount the screw cap in an cover cap and interlock the two components. The cap can only be turned off the bottle if it is pressed and turned at the same time. Simple and proven a million times over, the design has been tested for its reliability and is considered childresistant in accordance with the above-mentioned standards and corresponding expert opinion.

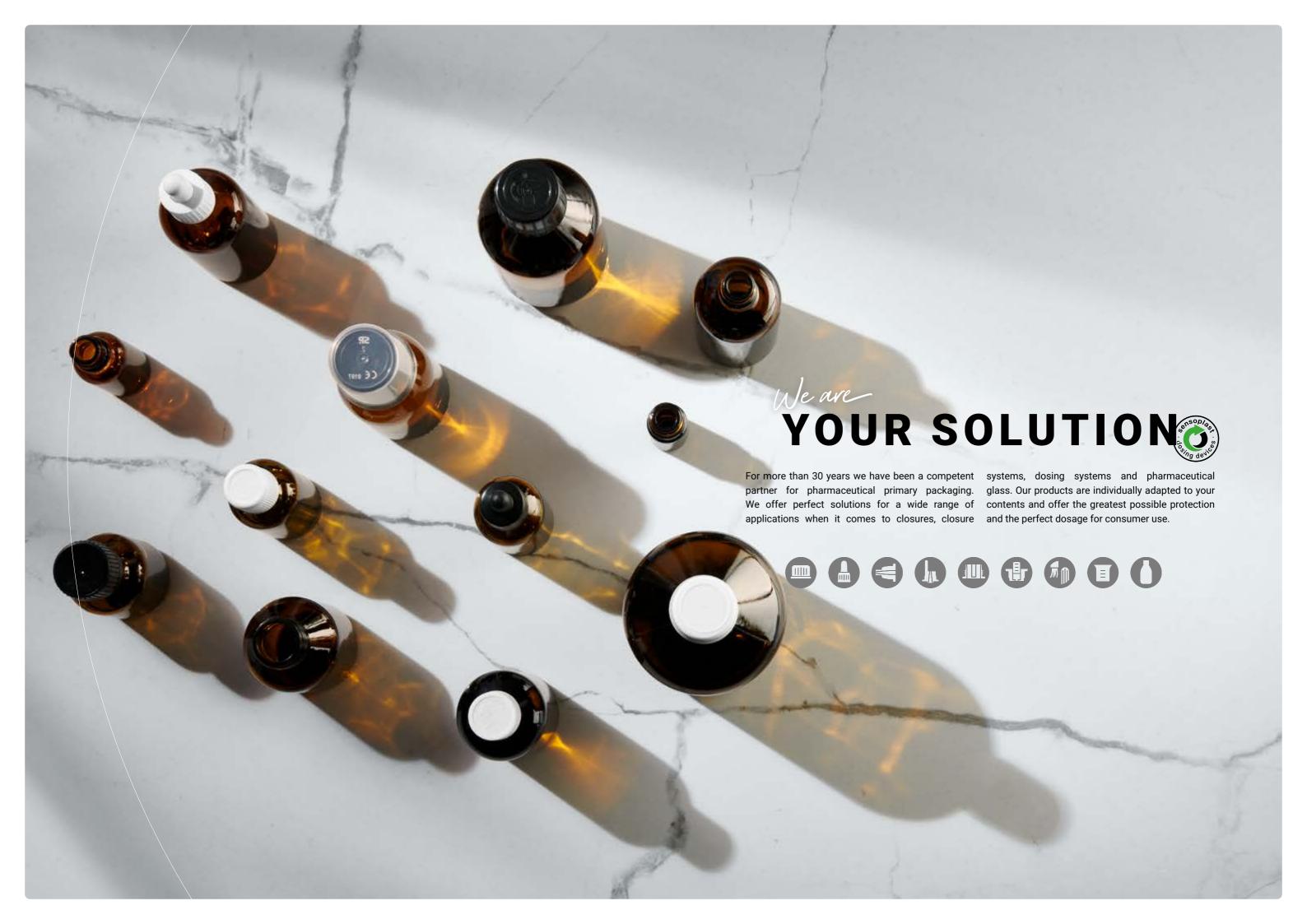
#### ivm CHILDSAFE - Institut VerpackungsMarktforschung GmbH





SENSOPLAST® Packmitteltechnik GmbH is certified according to DIN EN ISO 8317 as well as the US 16 CFR § 1700.20 certified. The packaging is child-resistant and suitable for adults.

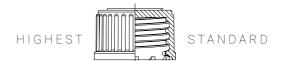
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## REGULAR CLOSURES

#### GENERAL INFORMATION

Easy handling is the essential criterion of all SENSOPLAST® regular closures. Manual capping as well as semi- or fully-automatic processing on filling and capping lines is possible. The internal geometry of the closure is adapted to the

respective dosing insert, so that pre-assembly in our factory can be carried out without any problems. The outer shape of a closure type is identical despite different dosing inserts.



#### ADVANTAGES

- · Simple closure
- · Robust sealing
- · Sturdy design
- Perfect grip

- Suitable for sealing machines (semi & fully automatic)
- Manual processing possible
- · Easy handling for end users
- Ideal for all liquids which do not require a child safety lock
- · Large variety of colors

#### COMBINATIONS



Horizontal droppers

Vertical droppers

Pourers

Spray inserts

Syringe adaptors



Pipette assemblies



Brush & spatula assemblies



Sealing insert closures





DIN 168 GL-18 (DIN 18)
DIN 168 GL-22 (DIN 22)

PP 28 (DIN 6094-7)



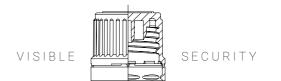
Raw material

Polypropylene (PP)

Polyethylene (HDPE)







## TAMPER EVIDENT **CLOSURES/TE1**

#### GENERAL INFORMATION -

In addition to the ease of handling, the great advantage of our tamper-evident closures is their perfectly visible protection when the product is opened for the first time. further use. Depending on requirements, manual capping We manufacture one-piece, tamper-evident closures as individual components in a single injection-molding process. The advantage is that the tamper-evident ring

of the closure audibly tears off during the initial opening and remains clearly visible on the bottle shoulder during as well as semi-automatic or fully automatic processing on filling and capping lines is possible.



#### ADVANTAGES

- · Absolutely tamper proof
- · Sturdy design
- Perfect grip
- · Ring reliably tears off at the first opening by the end user
- · The tamper-evident ring clearly indicates that the shutter has already been opened
- · Manual processing possible
- · Suitable for sealing machines (semi & fully automatic)
- · Ideal for all liquids that do not require a child safety lock
- · Large variety of colors

#### COMBINATIONS



Horizontal droppers

Vertical droppers

Pourers

Spray inserts

Syringe adaptors



Pipette assemblies



Brush & spatula assemblies



Sealing insert closures





#### Threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)

Do you need an alternative thread form? Contact us for more information or continue reading on page 31.



#### Raw material

Polypropylene (PP) Polyethylene (HDPE)

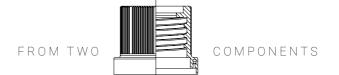
#### Variants

Fine fluting

Rough fluting







## **TAMPER EVIDENT CLOSURES/TE2**

#### GENERAL INFORMATION -

The "all-rounder" among screw caps: our two-part tamperevident cap. Its classically elegant design and visible protection when the product is opened for the first time and enable versatile use.

Our two-part tamper-evident closures consist of two components made of different plastic raw materials a closure body made of robust PP and a separately manufactured tamper-evident ring made of HDPE. advise you.

The tamper-evident ring of the closure audibly tears off during the initial opening and remains visible on the bottle shoulder. We are happy to offer exclusive design options for our tamper-evident closures on request. In addition to different outer shapes and ribbing, it is also possible to apply your company logo and to select the color of your choice. Please contact our sales team, we will be happy to



#### ADVANTAGES

- · Absolutely tamper proof
- · Sturdy design
- · Attractive outer shape
- · Exclusive design options
- Perfect grip
- · Manual processing possible
- · Suitable for sealing machines (semi & fully automatic)
- · Ideal for all liquids that do not require a child safety lock
- · Ring reliably tears off at the first opening by the end user
- · The tamper-evident ring clearly indicates that the closure has already been opened
- · The color of the cap and tamperevident ring can be selected independently of each other

#### COMBINATIONS



Horizontal droppers

Vertical droppers

Pourers

Spray inserts

Syringe adaptors



Pipette assemblies



Brush & spatula assemblies



Sealing insert closures



FACTS

Threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)



Raw material closure

Polypropylene (PP)

Raw material tamper evident ring

Polyethylene (HDPE)

Variants

Fine fluting

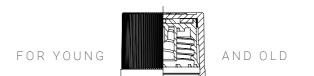
Rough fluting

Polyethylene (HDPE)









## CHILD RESISTANT CLOSURES

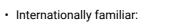
#### GENERAL INFORMATION -

Particularly when it comes to the topic of "child-resistant packaging", we see ourselves as a responsible manufacturer. That is why our child-resistant screw caps offer maximum safety. At the same time, the packaging must meet the needs of elderly people. Our closures meet these conflicting product requirements in equal measure. Safely closed for small children - easy to open for senior citizens.

We mount the screw cap in a cover cap and interlock the two components. The cap can only be twisted off the bottle by pressing and twisting at the same time. Simple and proven a million times over, the design has been tested for reliability in accordance with the criteria of DIN EN ISO 8317 and US 16 CFR § 1700.20 and is considered child-resistant in accordance with the above-mentioned standards and the corresponding expert opinion.



#### ADVANTAGES



- Press + Turn system
- Low torque
- · Reliable technology
- Different lid embossings possible (logo, symbols, etc.)
- Childproof and senior-friendly
- · Realization of your design
- If child safety is absolutely necessary





#### COMBINATIONS -



Horizontal droppers

Vertical droppers

Pourers

Spray inserts

Syringe adaptors



Pipette assemblies



Brush & spatula assemblies



Sealing insert closures

#### FACTS



#### Threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)



#### Raw material cover cap

Polypropylene (PP)

#### Raw material inner cap

Polypropylene (PP)
Polyethylene (HDPE)

#### Variants

Short cover cap: Fine fluting

Tall over cap: Fine fluting, rough or no fluting (smooth)









## TAMPER EVIDENT CHILD RESISTANT CLOSURES

#### GENERAL INFORMATION -

Our "TE variant" meets the same requirements regarding child safety and senior-friendly use as our child safety closures (see page 23).

We mount the screw cap in a cover cap and interlock the two components. The cap can only be twisted off the bottle if it is pressed and twisted at the same time. Simple and proven a million times over, the design has been tested for reliability according to the criteria of DIN EN ISO 8317 and US 16 CFR § 1700.20 and is considered child-resistant according to the above-mentioned standards and

corresponding expert opinion. In addition, it provides visible protection when the product is opened for the first time. The tamper-evident ring of the closure audibly tears off when the bottle is opened for the first time and remains visible on the shoulder of the bottle.

We are happy to offer exclusive design options for our tamper-evident closures on request. In addition to different outer shapes and ribbing, it is also possible to apply your company logo or select your desired color. Please contact our sales team, we will be happy to advise you.



#### ADVANTAGES -

- Internationally familiar:
   Press + Turn system
- · Low torque
- · Reliable technology
- Different lid embossings possible (logo, symbols, etc.)
- Attractive outer shape
- · Childproof and senior-friendly
- · Realization of your design
- Color of closure and tamper-evident ring can be selected independently





#### COMBINATIONS -



Horizontal droppers

Vertical droppers

Pourers

Spray inserts

Syringe adaptors



Pipette assemblies



Brush & spatula assemblies



Sealing insert closures

#### FACTS



#### Threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)



Raw material cover cap

Polypropylene (PP)

#### Raw material inner cap

Polyethylene (HDPE)

#### Variants

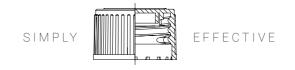
Short cover cap: Fine fluting

Tall over cap: Fine fluting, rough or no fluting (smooth)

) p. op j.c. .c (. .







## SELF SEALING CLOSURES

#### GENERAL INFORMATION -

Intrinsic-sealing, also known as self-sealing or conical sealing, is the simplest and least expensive method of sealing a bottle tightly. The advantage is that only one raw material specification is required. Simple, but efficient. The closure is given a conical sealing lip on the inside of the closure in the injection molding process. Sealing is

achieved by the closure itself, without the need for any other component. All SENSOPLAST® closure types are available self-sealing. If required, various inserts such as brushes or spatulas can be mounted in this closure type. Our sales team will be happy to advise you.



#### ADVANTAGES -

- Easy handling
- · Cost efficient
- · Effective sealing
- Stable design

- Perfect grip
- · Manual processing possible
- Suitable for sealing machines (semi & fully automatic)
- Ideal for all liquids which do not require a child safety lock
- · wide range of colors

#### FACTS



#### Threads

DIN 168 GL-18 (DIN 18)

DIN 168 GL-22 (DIN 22)

PP 28 (DIN 6094-7)



#### Types

Regular closures

Tamper evident closures/TE1

Tamper evident closures/TE2

Child resistant closures/CRC

Tamper evident child resistant closures



#### Raw material

Polyethylene (HDPE)

Polypropylene (PP)







## **SEALING INSERT CLOSURES**

#### GENERAL INFORMATION -

optimum sealing of the filling material is achieved with a sealing liner tailored to the intended use. For all products, cooperation with you, we develop solutions tailored to we can meet your individual requirements and offer a your product so that the corresponding sealing inserts variety of special sealing inserts (liners) made of different (liners) of the closure meet the requirements of the raw materials.

Depending on the requirements of the various liquids, the Depending on the respective liquid, Teflon or aluminum liners can also be used, among others. In close various liquids.



#### ADVANTAGES

- · Universal use with different viscosities of liquids
- · Perfect tightness
- Wide range of materials
- · Exact fit for the selected closure
- Independent of the diameter of the bottle orifice

#### FACTS -



#### Threads

DIN 168 GL-18 (DIN 18)

DIN 168 GL-22 (DIN 22)

PP 28 (DIN 6094-7)



#### Types

Smooth liners made from EPE foam in various densities

Smooth liners made from EPE foam laminated with aluminium, Teflon or other materials in various densities

Conical liners made from polyethylene (LDPE)

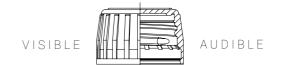


#### Raw material

Polyethylene (HDPE)

Polypropylene (PP)





### **SENSOscrewCAP**

#### GENERAL INFORMATION -

your product is first opened. The SENSOscrewCAP from SENSOPLAST® consists of two components of different plastic raw materials. A separately manufactured tamperevident ring made of HDPE is mounted in the closure body, which is made of robust PP. The tamper-evident ring of The color of the cap and tamper-evident ring can be varied the closure audibly tears off during the initial opening

Easy handling and perfectly visible protection when and remains visible on the bottle shoulder during further use. This reliable function offers a high level of tamperevidence for your customers and at the same time enables controlled dosing of your liquid.

to enable product labeling, for example.



#### ADVANTAGES —

- · Color of cap and tamper-evident ring can be selected independently
- · Tamper evidence
- Perfect grip

- · Comfortable screwing
- Many design options
- · Reliable technology
- · Manual processing possible
- · Suitable for closing machines (semi & fully automatic)

#### COMBINATIONS -



Spray inserts

Pourers

Syringe adaptors

Sealing insert closures

#### FACTS



Threads

PP 28 (DIN 6094-7)

Do you need an alternative thread form? Contact us for more information.



Raw material

Polyethylene (HDPE)

Polypropylene (PP)

#### Variants

Without tamper evident ring With tamper evident ring/TE1

With tamper evident ring/TE2

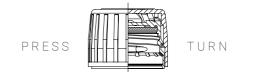
Fine fluting

Rough fluting









### **SENSOkidCAP®**

#### GENERAL INFORMATION -

evident closure with a child safety solution. The cap can only be removed from the bottle by simultaneously pressing and turning the cap. At the same time, tearing off the tamper-evident ring reveals the initial opening.

This special design has proven itself millions of times over and has been tested for reliability in accordance with the international criteria of DIN EN ISO 8317 and US 16 CFR § 1700.20.

SENSOPLAST® combines the advantages of tamper- As a result, we achieve maximum safety for children and can still offer a haptic that can be opened comfortably by senior citizens.

> In addition to the individual design of the lid embossing, the SENSOkidCAP® can be combined with all common inserts from our range and thus offers maximum leakage protection as well as exact dosing of the contents.



#### ADVANTAGES -

- · Color of cap and tamper-evident ring can be selected independently
- · Internationally familiar: Press + Turn system
- · Different lid embossings possible
- · Childproof and senior-friendly at the same time
- · Manual processing possible
- Suitable for closure machines (semi & fully automatic)
- · When childproofing is absolutely necessary

FACTS

· Perfect grip





#### COMBINATIONS -



Pourers

Spray inserts

Syringe adaptors





Sealing insert closures





PP 28 (DIN 6094-7)



Raw material cover cap

Polypropylene (PP)

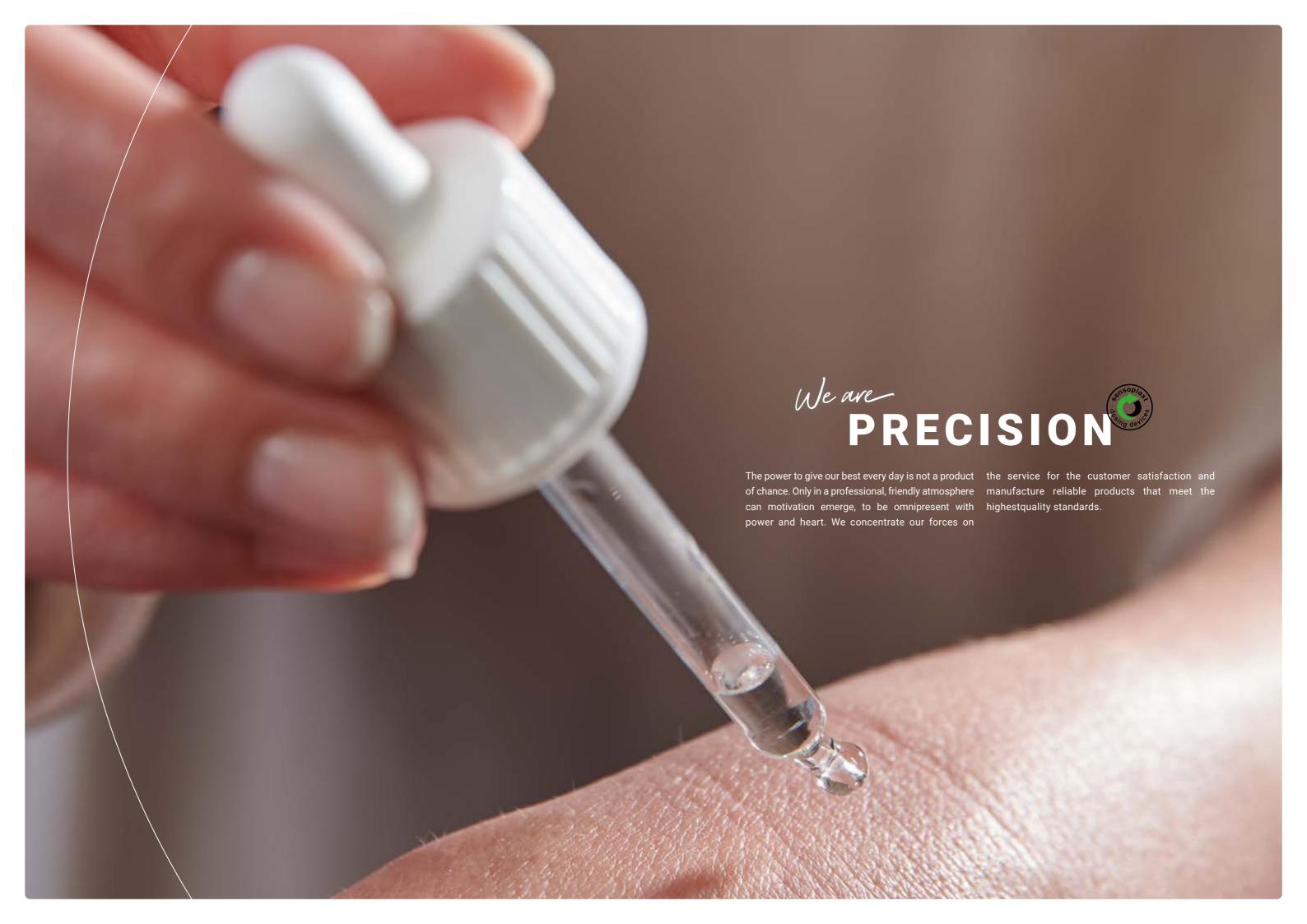
Raw material inner cap

Polyethylene (HDPE)

Variants

With tamper evident ring

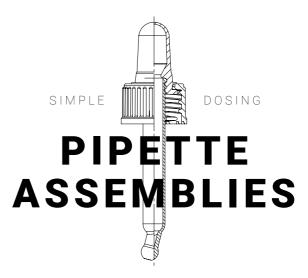
Without tamper evident ring











Our pipette assemblies are market proven for dispensing liquid ingredients with pinpoint accuracy and in precise quantities. SENSOPLAST® offers a wide range of different types and lengths made of AR-GLAS® in hydrolytic class III. In addition to the length of the pipette, the size and raw material of the teat can be selected variably.

Thermoplastic elastomer (TPE) offers several advantages over natural rubber: The material is 100% recyclable. It can be re-granulated and reused at any time. Shorter delivery times, higher product quality and resistance to aggressive liquids make TPE universally deployable.

SENSOPLAST® pipette assemblies have pharmaceutical approval and meet food contact standards.

#### The following closure types can be used:

Regular closures (RC), made of PP
Tamper evident closures/TE1, made of HDPE
Tamper evident closures/TE2, made of PP
and HDPE (ring).

#### Pipette types:

Curved ball tip (standard)
Straight, conical tips
Various other tip shapes are possible



#### ADVANTAGES

- Individual length and graduation
- Simple and market proven handling
- · Countable drops by pressure
- · Perfect and hygienic dosing
- Threaded connectionWide range of designs,
- raw materials and colors

- · Perfect for CBD and other oils
- Individual components can be selected individually
- · With or without tamper evident ring
- · Manual processing possible
- Suitable for capping machines (semi & fully automatic)



- Optimized delivery times
- Variable size of the teat
- Higher resistance against aggressive liquids
- Constant production quality
- Meets the standards for food contact
- · Individual color choice

#### FACTS



#### Threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)



#### Pipette graduation

Printed graduation with ceramic ink in black or white

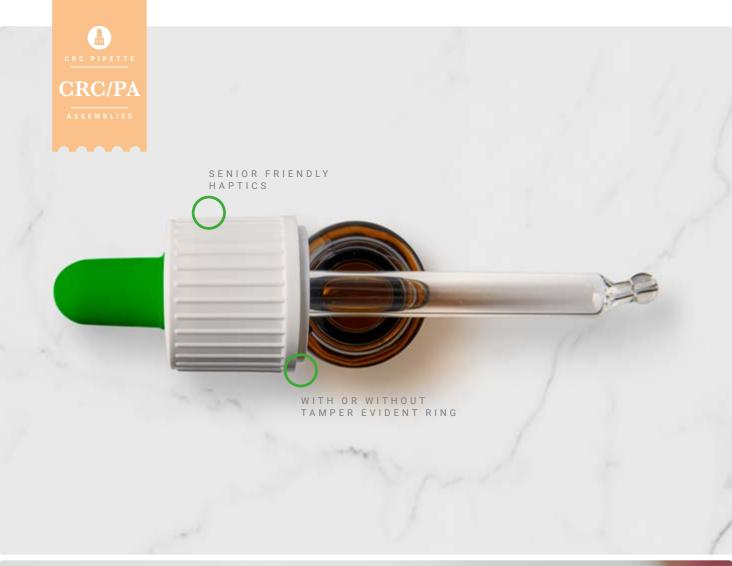


#### Raw material teat

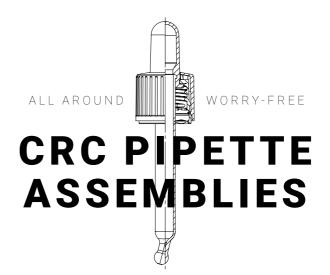
Thermoplastic elastomer (TPE)

Nitrile rubber (NBR)

Natural rubber (NC)







Accidents involving children are a sensitive issue. Here, With our CRC pipette assemblies, you have a wide range it is particularly important to ensure maximum safety in order to provide the greatest possible protection. This is exactly what our child-proof pipette assemblies guarantee to a high degree, while at the same time offering precise dispensing of liquids.

Simple and proven a million times over, the design of the pipette assembly and child-resistant closures have been tested for reliability in accordance with the criteria of DIN EN ISO 8317 and US 16 CFR § 1700.20 and are considered child-resistant in accordance with the aforementioned standards and the corresponding expert opinion.

of customization options. From the length of the glass pipette or its graduation to the color and volume of the teat. A first-class all-around worry-free product in excellent SENSOPLAST® quality - with approval for the pharmaceutical and food sectors - Made in Westerwald.

#### The following closure types can be used:

CRC screw caps, made of HDPE CRC tamper-evident closures, one-piece (TE1), made of HDPE

#### Pipette types:

Curved ball tip (standard) Various other tip shapes are possible



#### ADVANTAGES

- · With or without tamper evident ring
- · Color of closure and tamperevident ring can be selected independently
- · Teats with volumes of 0.7 or 1.0 ml in different colors
- · Length of glass pipette can be selected to fit all standard bottles
- · Individual graduation of the glass pipette possible
- · Childproof and suitable for senior citizens
- · Worldwide pharmaceutical and food conformity
- · GMP guidelines





SENSOPLAST® is also certified according to DIN EN ISO 9001 and DIN EN ISO 15378

#### FACTS





DIN 168 GL-18 (DIN 18) for dropper bottles made of glass and PET



#### Pipette graduation

Printed graduation with ceramic ink in black or white



#### Raw material teat

Thermoplastic elastomer (TPE)

Nitrile rubber (NBR)

Natural rubber (NC)









### HORIZONTAL DROPPER

#### GENERAL INFORMATION

SENSOPLAST® horizontal droppers are true all-rounders. They are used in a variety of applications, especially in the field of essential oils, herbal preparations or homeopathy, where the dosage may vary slightly. This variance is caused by the different position of the bottle at an angle of approx. 120° to 150°, depending on the application. The drop runs over the horizontal dropper without touching the mouth of the bottle, thus preventing the formation of a convenient dosing.

"liquid bead" on the outside of the bottle. The excess is returned to the bottle without leaving any residue. We will select for you the horizontal dropper that exactly matches your liquid.

By sending us your product samples, we will find the perfect dropper type to provide your customers with convenient dosing.



#### ADVANTAGES -

- Universal applicability for different viscosities of liquids
- Solids contained in the fluid (e.g. vegetable) do not hinder the dripping behavior
- Drip rate can be adjusted by the user

- · High screwing comfort
- · Easy handling
- Can be combined with all SENSOPLAST® DIN 18 closures
- · Manual processing possible
- Suitable for capping machines (semi & fully automatic)



#### WE CARE —

We will select the horizontal dropper that exactly matches your liquid.

Simply send us a product sample.

#### FACTS



#### Suitable for threads

DIN 168 GL-18 (DIN 18)

DIN 168 GL-22 (DIN 22)



#### Raw material

Polyethylene (LDPE)



#### Types

UNI 1 - for oily, slightly viscous liquids

UNI 2 - for alcoholic and aqueous liquids

R 07/21 - for alcoholic and aqueous liquids









Precise dosing of preparations is essential, especially in pharmacy and diagnostics. SENSOPLAST® vertical droppers allow exact dosing of any liquid. A bottle holding position of 180° (overhead) allows hardly any tolerances. The design of a centrally positioned drop tube as well as a laterally positioned air tube ensures extremely accurate drop delivery. The speed, size and weight of the drop

depend on the liquid and the diameter of the drop and air tubes. Every liquid is different - in consistency, volume and density. We select or develop for you the vertical dropper that exactly fits your liquid and find the optimal product combination of closure and dripping insert. Send us your preparation with the desired bottle size and dosing instructions. We will do the rest for you.



#### ADVANTAGES -

- Incorrect dosing by the consumer can be minimized, as the holding position (180°, overhead) is unambiguous
- Countable drops
- · Drop size and weight can

be precisely dosed

- Can be combined with all SENSOPLAST® DIN 18 closures
- Manual processing possible
- Suitable for capping machines (semi & fully automatic)



#### WE CARE -

We will select for you the vertical dropper that exactly fits your liquid.

Simply send us a product sample.

FACTS



Suitable for thread

DIN 168 GL-18 (DIN 18)



Raw material

Polyethylene (LDPE)



Types

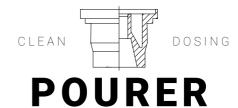
Standard vertical droppers

Compact vertical dropper









pourers are used in preparations where the dosage can vary slightly. Here, too, there is a wide range of the spout ensures that the liquid does not come into applications, from essential oils to food oils to contact with the glass thread and enables clean pouring cough mixtures.

SENSOPLAST® pourers, with their perfectly matched convenience par excellence.

Intuitive. Individual. Clean. Similar to horizontal droppers, functional parts, meet the different consumer habits in the holding position of the user. The sharp edge of regardless of the holding position. Consumer



#### ADVANTAGES —

- For all viscosities
- · Clean pouring with perfect backflow
- · Suitable for all closures
- · Manual processing possible
- · Suitable for capping machines (semi- & fully automatic)



We will select for you the pourer that exactly fits your liquid.

Simply send us a product sample.

FACTS -



Suitable for threads

DIN 168 GL-18 (DIN 18)

DIN 168 GL-22 (DIN 22)

PP 28 (DIN 6094-7)

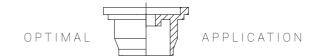


Raw material

Polyethylene (LDPE)







## **SPRAY INSERT**

#### GENERAL INFORMATION -

SENSOPLAST® spray inserts are used wherever an lotions or skin oils can also be applied optimally without undetermined amount of liquid is to be applied. Closures coming into contact with the glass thread. with integrated spray inserts reliably and cleanly limit the We will be happy to check and advise you on whether a flow rate of very thin liquids directly at the bottle neck and spray insert is suitable for your medium. Simply get in ensure a controlled flow. Less flowable fluids such as touch with our sales team.



#### ADVANTAGES

- · Clean and easy dispensing
- · Controlled reflux
- For all common closures
- Optimal application
- · Suitable for pharmacy, medicine, dietary supplements, lifestyle and food products

- Suitable for globules
- Manual processing possible
- · Suitable for capping machines (semi- & fully automatic)

#### FACTS -



Suitable for threads

DIN 168 GL-18 (DIN 18)

PP 28 (DIN 6094-7)

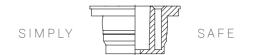


Raw material

Polyethylene (LDPE)







## **DOSING SYRINGES & ADAPTORS**

#### GENERAL INFORMATION -

applications, especially in medicine. The combination of SENSOPLAST® syringe adaptors and dosing syringes enables extremely precise dosing of contents - whether liquid or less flowable. They form a precise and perfectly coordinated dosing system.

Syringe adaptors from SENSOPLAST® are also suitable for all commercially available dosing syringes and offer

Dosing syringes are used in a wide variety of a complementary component for numerous syringe diameters with a secure grip for comfortable and precise dosing. Until filling, the syringe adaptor is integrated in the screw cap.

> Our sales team will be happy to advise you on the perfect combination of your liquid with the syringe adaptor and suitable dosing syringe.



#### ADVANTAGES -

- · Perfect and hygienic dosing
- · Pre-assembled in the closure
- · Clean and easy dosing
- · Suitable for globules
- · Manual processing possible
- Suitable for closure machines (semi- & fully automatic)



### WE CARE -

The matching syringes for the respective size can be ordered as well.

#### FACTS -



Suitable for threads

DIN 168 GL-18 (DIN 18)

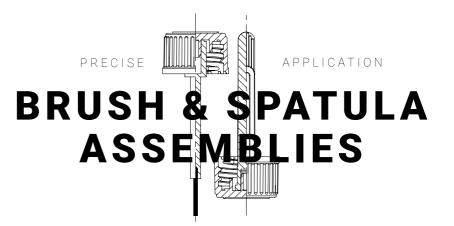
PP 28 (DIN 6094-7)



Raw material

Polyethylene (LDPE)





Our assemblies are especially used in the field of beauty care and in the medical field. Brush and spatula assemblies enable precise application of viscous liquids.

The preparation is only released when it touches the skin or surface. SENSOPLAST® assemblies offer a high degree of variability in the nature of the brush. Easy to handle, the products guarantee applicability of fluids with varying degrees of viscosity. The combination of the correct screw

cap, a tamper-evident closure or a child-resistant closure result in the exact combination possibilities which not only guarantee the leakage safety of your liquid, but also present the advantages of your product in form and color.

Contact us. With us, you will find the appropriate brush and spatula assemblies for your preparation relating to its viscosity as well as the required length in relation to the selected bottle.



#### ADVANTAGES —

- · Easy and market-tested handling
- Applicability of preparations with different viscosities
- Large variability in design, length and color
- Large selection of closures depending on application area and safety class



WE CARE -

Which liquid is involved?

What are the physical properties of the liquid?

#### FACTS



#### Suitable for threads

DIN 168 GL-18 (DIN 18) PP 28 (DIN 6094-7)



#### Raw material

Spatula: Polyethylene (LDPE)

Brush shaft: Polyethylene (LDPE)

Brush hair: black TYNEX® monofilament (PA)



#### Types

Regular closures

Tamper evident closures/TE1

Tamper evident closures/TE2

Child resistant closures/CRC

Tamper evident child resistant closures (CRC/TE)









## **MEASURING CUPS & MEASURING SPOONS**

#### GENERAL INFORMATION -

Dosing aids such as measuring cups made of poly- as it is often required for drug intake. The measuring cup propylene are almost unbreakable and resistant. variants are variably attachable to PP 28 threaded They are used above all in the food and pharmaceutical industry in the dosing of products where a in secondary packaging. precisely measured quantity is essential.

SENSOPLAST® measuring spoons or measuring cups enable precise dosing and oral application of liquids with different viscosity grades.

Our standard measuring spoons are available with scaling of 0.5 ml, 2.5 ml and 5 ml, allowing precise dosing,

closures and offer a very economical use of space

All SENSOPLAST® measuring cups and measuring spoons are certified in accordance with 93/42/EWG and bear the CE mark and manufacturer's logo in accordance with the Medical Devices Regulations.





#### CERTIFICATION —

- Clear transparency
- · Simple and market-proven handling
- · Applicability of preparations with different degrees of viscosity
- · Stable design

- · Measuring cups fit on our PP 28 closures
- · Manual processing possible
- · Suitable for capping machines (semi- & fully automatic)
- · Certified medical device



FACTS -



**Types** 





Handling Raw material

Can be placed on closures with Measuring cups PP 28 thread

Polypropylene (PP), transparent

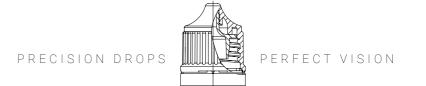
Measuring spoons

Measuring spoons are usually enclosed with preparations

Polystyrene (PS), transparent/glossy







## **SENSOeyeDROP**

#### GENERAL INFORMATION -

The eye is one of the most sensitive organs of the body and reacts particularly sensitive to stimuli: if the drops touch the cornea, the eye unconsciously tries to flush out this "foreign body" by blinking and increasing tear production. Our SENSOeyeDROP Systems makes the application as simple and convenient as possible.

#### SENSOeyeDROP for Plastic Bottles

By pressing on the bottle, the patient is able to dose the appropriate medium independently and precisely.





#### SENSOeyeDROP for Glass Bottles

By pressing on the spout, the patient is able to apply the appropriate liquid precisely and accurately. This option can be put together in any colour combination and fits all DIN 168 GL18 moulded & tubular glass bottles Market proven in human-, dental- and veterinary medicine.



- · Simple and convenient use
- · Applicability with different viscosities
- Supplied pre-assembled (Cap and Dropper)
- Individually shrink-wrapped (flow-wrap)

- Effortless & easy removal of the clip-on protective cap
- · First-class alternative to the expiring CB or BB raw materials
- · Aesthetic colour design, flow-wrapping & sterilizable on demand
- Safe and injury-free application, especially for children

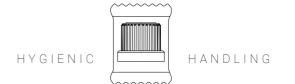


#### RAW MATERIAL

Cap: High Density Polyethylene (HDPE), Dropper: Low Density Polyethylen (LDPE) Polypropylene (PP), Polyethylene High Density (PE-HD), Thermoplastic Elastomer (TPE: Pharma-grade), DIN 168 GL18 moulded & tubular glass bottles







## SINGLE PRODUCT PACKAGING

#### GENERAL INFORMATION -

At SENSOPLAST, we are committed to delivering the highest quality products while prioritizing the safety and well-being of your patients and consumers. With our single product packaging, each product is carefully sealed and delivered in its own separate package. This innovative approach brings a number of benefits, such as improved hygiene and enhanced handling convenience.

By offering products in individual packaging, we ensure that each item remains untouched until it reaches the

At SENSOPLAST, we are committed to delivering the consumer. This helps minimize the risk of contamination highest quality products while prioritizing the safety and well-being of your patients and consumers. With our of your product.

Furthermore, we are pleased to introduce an exciting new feature made possible by our individual packaging: the ability to add single pipette assemblies as an additional accessory pack. This means that you can now conveniently supply your customers with single pipettes customised to your specific needs, in parallel with your regular item.



#### ADVANTAGES

- Improved Hygiene
- · Enhanced Handling Convenience
- · Reduced Contamination Risk
- · Clear transparency &
- safety of the product
- Market-proven handling



Not sure if this option could be relevant for your product?

Contact us, we will be happy to advise you.

FACTS



#### Types

This option is available for every SENSOPLAST product. From customised to standardised packaging.



#### Raw material

Polypropylene









as moulded glass, remains one of the leading primary of closure, dosing system and bottle. materials for pharmaceutical, cosmetic and chemical Thanks to the close cooperation of our in-house research applications.

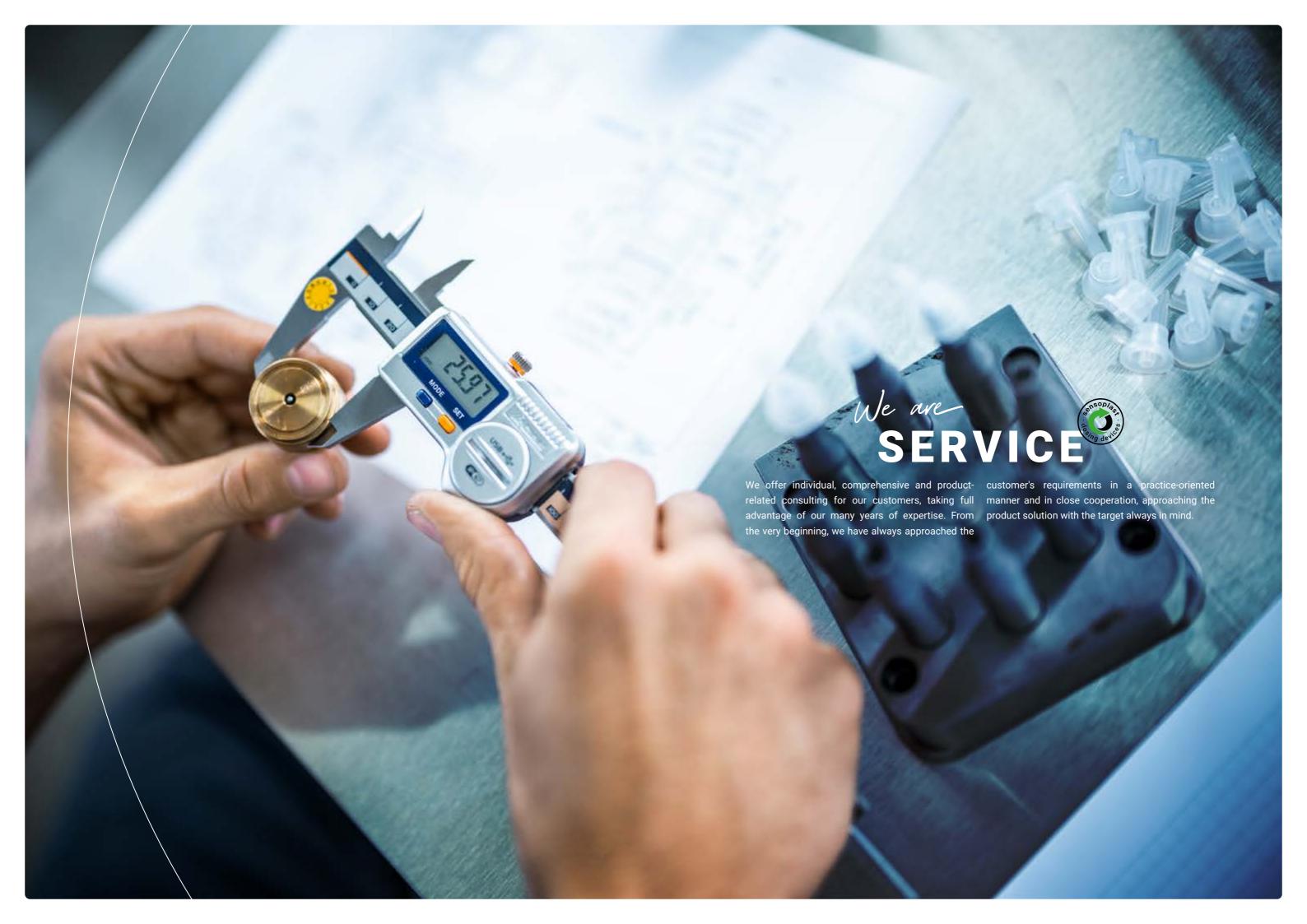
and elastomer manufactured by ourselves, we offer suitable pharmaceutical bottles with screw threads, depending on customer and product requirements.

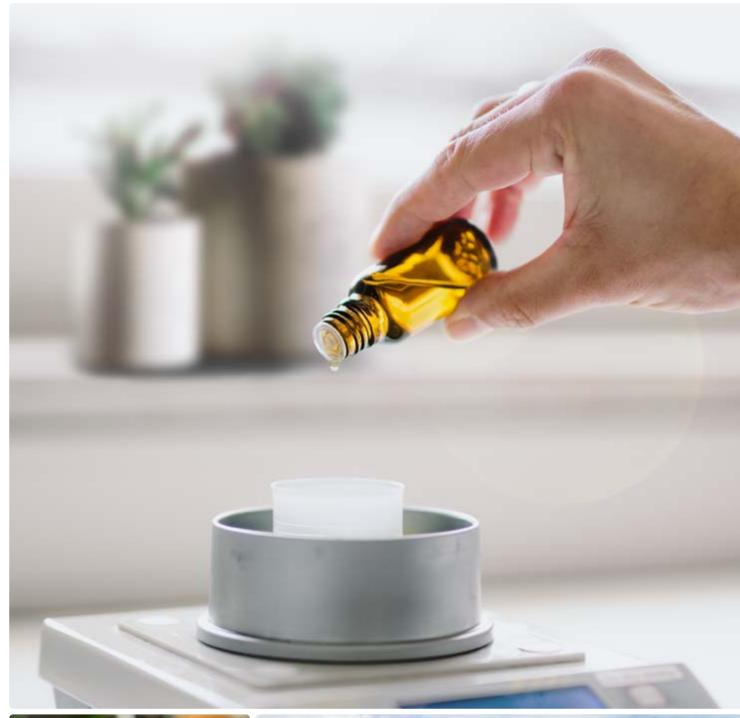
The SENSOPLAST® container glass range offers complete We provide all common neck finish shapes and volumes solutions for all sectors. Container glass, also known in our program and guarantee the perfect combination

and development department with leading European In addition to our product range made of plastic glassworks, we can find the optimum complete solution for every customer requirement. Our amber and clear glass bottles are available film-sealed in "Safepacks"or "Trays".

#### FACTS -

Types	Filling quantity	Threads
Dropper bottles	5-100 ml	DIN 168 GL-18 (DIN 18)
Syrup bottles	30-1000 ml	PP 28 (DIN 6094-7) DIN 168 GL-22 (DIN 22)
Medicine packaging bottles	50-1000 ml	PP 28 (DIN 6094-7) DIN 168 GL-22 (DIN 22)
Meplat bottles	30-1000 ml	PP 28 (DIN 6094-7) DIN 168 GL-22 (DIN 22)











#### QUALITY IS NOT DETERMINED BY THE PRODUCT ALONE -

Excellent service is our top priority. Individual and personal advice with fixed contact persons and fast response times are a matter of course for us. It's the little things that make the difference. That's why you can trust process not only meets the highest requirements for SENSOPLAST®, because we pay attention to details and know about dispensing solutions like no one else.

We treat our customers as equals and adhere to agreements: Short delivery times with binding delivery dates. Our product designs are a perfect fit thanks to extensive technical testing of product requirements. The combination possibilities: almost unlimited, but individual in manufacturing to assembly and packaging, incorporating every case. Worldwide on-site support by our service the highest quality standards. technicians guarantees you support at any time during the ongoing production or a product changeover.

All production-relevant processes are fully documented by us - from batch tracking of the individual components to shipment of the end product. The entire production pharmaceutical primary packaging, it is based on them. Excellent hygiene standards included.

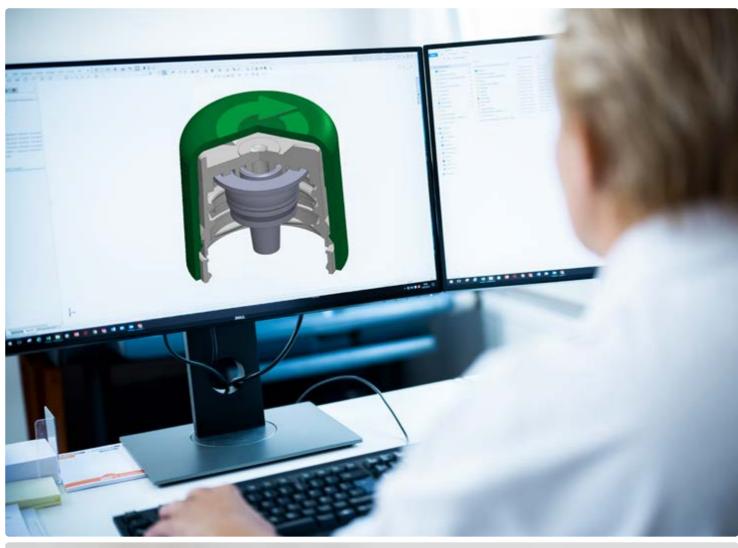
The SENSOPLAST® quality management system is certified according to the international standards DIN EN ISO 9001 and DIN EN ISO 15378. Our customers can be assured that all quality-related requirements are met, from

#### CERTIFICATES - DIN EN ISO 9001 & DIN EN ISO 15378





Scope: Development, manufacturing and distribution of pharmaceutical primary packaging materials.







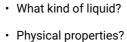
3 SIMPLE STEPS

#### **Customer requirements**









- Dosing requirement?
- Closure system requirement?
- · Which certifications are required?

#### **Development + Production**







In addition, we offer our customers professional dosing trials free of charge.

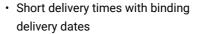
short notice.

#### Delivery



- You will receive your product with all necessary technical requirements at the agreed delivery times
- Special requests in terms of shape, color and finishing are also possible on request

#### ADVANTAGES —



- Individual and personal advice with fixed contact persons and fast response times
- Professional documentation of all quality-related requirements, e.g. for certificates, declarations of conformity, etc.
- Extensive technical review of requirements and recommendation of optimal products
- Worldwide on-site support during ongoing production or during changeover to new closure systems by our qualified service technicians





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Keep track of industry-specific News and SENSOPLAST® company news.

linkedin.com/company/sensoplast





#### FACEBOOK

Get regular insights into company and development news on our company account. facebook.com/sensoplast





#### INSTAGRAM

On our Instagram page you can find photos and videos informing you about the Company news. instagram.com/sensoplast/





#### YOUTUBE

Impressions of our products in the form of corporate, manufacturing and product videos as well as expert tips will follow shortly. tinyurl.com/yt-sensoplast

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