



**Sanner – Your complete solutions provider  
for tubes and closures**



## 60 years of experience – 6 million tubes and closures each day

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Our combinations of tubes and closures can be used to package nutritional supplements, vitamins and probiotics as well as solid pharmaceuticals such as effervescent tablets, orally dissolving tablets and lozenges. As the global market leader for desiccant primary packaging we know how to protect your products against moisture, mechanical damage and tampering.



### Order from the expert!

Sanner introduced the world's first desiccant packaging in the 1960s. Since then we have supplied all the key players in the nutritional supplement and pharmaceutical industries. Constant sharing of experience between the

Sanner locations and continuous efforts to improve the technologies involved (such as in-mold labeling or Off-Set Print HD) ensure optimal results and synergies for your packaging.

Sanner has the most comprehensive range of tubes and closures in the world:

- Packaging for tablets of up to 36 mm in diameter
- with or without spacers
- with or without tamper evident
- with different types and amounts of desiccants
- suitable for aluminum tubes

# The advantages of a full-range supplier

- **Tightness:** Sanner's hard/soft principle provides optimal fit between the plastic tube and the closure
- **Moisture protection:** Decades of experience in desiccant processing ensure the longest possible shelf life and product safety
- **Tamper-evidence:** Undercuts provide visual indication of initial opening to ensure product integrity
- **Transport safety:** Integrated closure spacers protect your products during transport
- **Easy production processing:** Sophisticated geometries provide smooth processing of tubes and closures, especially on high-speed machines
- **Easy order processing:** **Single point** of contact simplifies the buying process

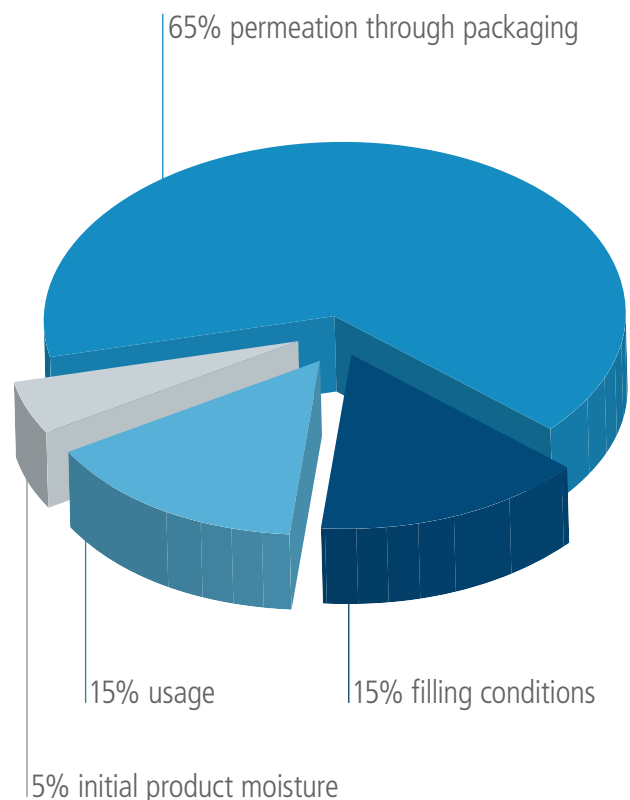


Original developer of 5 finger pictogram and undercut design

With its quality products DASG and DOSG, Sanner has extended its lead in desiccant closure technology.

## Plus: Sanner Active Packaging

The Sanner Atmo Guard system® is a service we provide to our customers: We calculate and recommend the ideal amount and type of desiccant to protect your product against degeneration. To do this, we consider all contributing sources of moisture ingress. We work with actual product data to guarantee the required shelf life and cost efficiency of your product. Reliability is founded on experience. Sanner produces active packaging systems that you can trust. We provide product safety from the very first to the very last tablet.



# Expertise in decoration techniques

Sanner provides tubes decorated using state-of-the-art techniques.

## HD offset printing

- HD printing up to 8 colors on any size of tube (letterset)
- Any combination of shades and colors, including metallic and special Pantone colors
- Modern technology and high accuracy deliver perfect, brilliant prints
- Non-bleeding inks and paints to achieve international food standards
- High-speed printing technology provides flexibility to accommodate any batch size
- Complete print management handling



## IML printing technology

- Design and packaging become one
- Photorealistic printing grabs attention, conveys value and sets your products apart at the POS
- Various surface textures available in up to 8 colors as well as metallic effects
- Good readability, even of the smallest font size providing more consumer-friendly information in the same area
- Decoration resistant to scratching and impacts
- Complete processing of IML film printing and production



# Packaging of the future

The consumer's first contact is always with the packaging. Both functional and emotional expectations play an important role.

The combination of the in-mold-labeled Brilliance® tubes and the innovative FlipTop FOG 27 closures are the most consumer-friendly packaging currently on the market.



## Brilliance® tubes

Design and originality

- Manufactured with in-mold labeling technology
- Photorealistic printing
- Differentiate products
- Printing of QR codes

## FOG 27

Functionality and user-friendliness

- FlipTop closure remains attached to the tube
- 70% less opening force required
- Pain-free first opening
- The majority of consumers confirm intuitive re-closing



## 85% of consumers can't be wrong

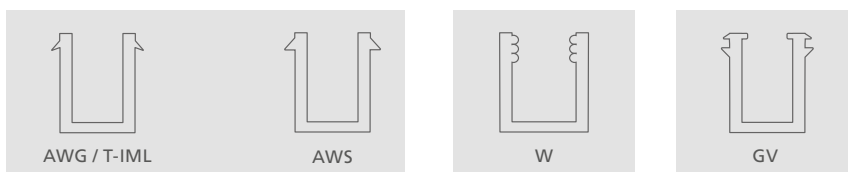
85% of the consumers in a market survey confirm improved handling and high user-friendliness, while only requiring one third as long to open. The combination of FOG 27 closures and Brilliance® tubes opens up new target groups and provides better customer retention.

<https://www.sanner-group.com/en/effervescent-packaging/effervescent-tubes-newest-generation/>

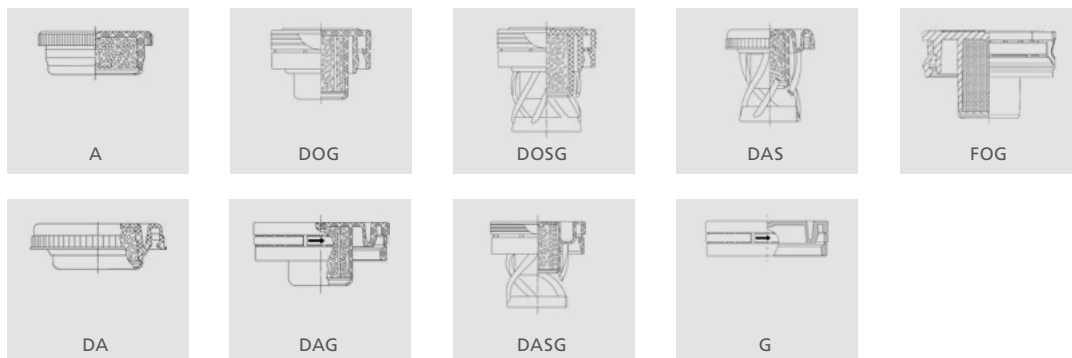


# Product overview

## Types of tubes



## Types of closures



SG: Silica Gel MS: Molecular sieve B: Blend

TABLETS Ø	TUBES	INTERNAL Ø in mm	LENGTH in mm	FITTING CLOSURES	SEAL Ø in mm	SPACER	TAMPER EVIDENCE	DESICCANT
18-20 mm	259 W	21.5	70.0	A-10	21.5 mm	no	no	SG
	545 W	21.0	80.0					
	257 W	21.0	87.0					
	208 W	21.0	105.3					
	258 W	21.1	107.7					
22-23 mm	512 W	24.25	56.3	A-20	25.2 mm	no	no	SG, MS
	506 W	24.25	64.1					
	211 W	24.25	69.0					
	540 W	24.1	90.0					
	328 W	24.1	101.0					
18 mm	R 539 AWG	19.8	63.0	DOG-13	20.1 mm	no	yes	SG
	R 534 AWG	19.8	73.0	DOSG-13	20.1 mm	yes	yes	SG, MS
	R 500 AWG	19.6	91.2					
	R 501 AWG	19.6	110.2					
20 mm	R 315 AWG	21.8	67.7	DOG-7	22.5 mm	no	yes	SG, MS
	R 175 AWG	21.8	73.0	DOSG-7	22.5 mm	yes	yes	SG
	R 528 AWG	21.8	84.8	DOSG-22	22.6 mm	yes	yes	SG, MS
	R 316 AWG	21.8	89.0					
	R 518 AWG	21.8	142.0	DAS-2	22.8 mm	yes	no	SG

All dimensions are approximate values. For exact dimensions, please request the technical data sheet.



TABLETS Ø	TUBES	INTERNAL Ø in mm	LENGTH in mm	FITTING CLOSURES	SEAL Ø in mm	SPACER	TAMPER- EVIDENT	DESICCANT
21-23 mm	R 547 AWG	24.3	75.0	DOG-4	24.7 mm	no	yes	SG
	R 548 AWG	24.3	90.0	DOSG-4	24.7 mm	yes	yes	SG, MS
	R 549 AWG	24.3	158.0					
23-24 mm	R 317 AWG	25.0	77.0	DOG-9	25.7 mm	no	yes	SG, MS
	R 333 AWG	25.0	93.1	DOSG-9	25.7 mm	yes	yes	SG
	R 318 AWG	25.0	98.0					
	R 310 AWS	24.9	115.5					
	R 337 AWS	24.9	125.5	DA-6	25.5 mm	no	no	SG
25 mm	R 536 AWG	27.0	53.0	FOG-27	27.9 mm	no	yes	SG, MS, B
	R 253 AWG	27.0	70.0					
	R 544 AWG	27.0	75.0					
	R 514 AWG	27.1	85.0	DASG-1	27.8 mm	yes	yes	SG, B
	R 276 AWG	27.0	91.0					
	R 507 AWG <sup>1</sup>	26.7	99.0					
	R 229 AWG	26.9	99.0	DOG-1	27.8 mm	no	yes	SG, MS, B
	R 268 AWG	27.0	120.5					
	R 508 AWG	27.1	126.0					
	R 510 AWG	27.1	130.0	DOSG-1	27.8 mm	yes	yes	SG, MS, B
	R 331 AWG	26.9	138.0					
	R 230 AWG	27.0	143.5					
	R 502 AWG	27.0	152.0	DAS-1	27.8 mm	yes	no	SG, B
	R 526 AWG	27.0	175.0					
	T-IML 143 <sup>2</sup>	27.0	143.5					
T-IML 165 <sup>2</sup>	27.0	165.0						
29 - 31 mm	R 509 AWG	32.45	104.5	DOSG-33	33.2 mm	yes	yes	SG, B
	R 515 AWG	32.5	124.0					
	R 533 AWG	32.5	175.0					
32 - 35 mm	R 503 GV	34.5	86.0	DAG-3	36.4 mm	no	yes	B
	R 172 GV	35.6	96.5	DASG-3	36.4 mm	yes	yes	SG
	R 504 GV	34.5	119.0					
	R 189 GV	35.6	126.0	G-13	36.4 mm	no	yes	no desiccant
	R 505 GV	34.5	144.0					
	R 224 GV	34.5	149.4					
	R 256 GV	35.4	166.0					

<sup>1</sup> Wall thickness 1.5 mm    <sup>2</sup> Tubes with IML technology

# Represented internationally



## Further closure solutions

In case you need further closure solutions and other tube formats, please contact us. We would be happy to provide our expertise for your special requirements and requests.

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