





The right dispensing systems partner for your needs

The pharmaceutical industry is as dynamic as ever. With accelerating consolidation, new regulations and shifting priorities, it seems the only constant is change. Operating in this environment can be challenging, particularly as resources are cut but growth expectations remain. Whether you're launching a new product, creating a line extension or seeking an alternative supplier, the right dispensing systems partner can fill the resource gaps and pave the way for growth.

End-to-End Services

Silgan Dispensing Systems Healthcare is more than a supplier of pumps and sprayers for your nasal, topical or opthalmic medications. We provide real value by partnering with you to understand your needs and guide your project through every step of the process. Our global team of experts delivers end-to-end services including consumer insights, design, regulatory affairs, engineering, project management and lab support.

Responsive Manufacturing

When your product demand increases, Silgan Dispensing Systems will be ready. We aim to maintain short lead times and invest in increasing our capacity as the market demands it. We know that capitalizing on opportunities as they arise and ensuring supply security are important to you, and we are flexible in our approach to providing you with a level of service that exceeds your expectations and helps you deliver results.

Industry-Leading Solutions

We believe that packaging does more than simply contain or dispense medication. Well-thought-out quality packaging can give your brand an edge in the marketplace that translates to improved patient loyalty, satisfaction and adherence. At Silgan Dispensing Systems, we infuse consumer insights throughout our development process to provide your patients with superior healthcare dispensing systems.

Solutions for High Regulated Markets



Mark II™

Key Features

- Excellent atomization capabilities with great performance and quality
- All pharma-grade materials comply with European and U.S. regulations
- · Standard white color; other colors available upon request
- · Available with shipping clip for various sizes and outputs
- Available with protective hood for nasal adapters in custom colors
- Drug Master File (DMF #12223)

Closure Sizes

Many standard closure sizes

Output Range

0.100 to 0.200 ml



MK™

Key Features

- Outstanding performance and dose accuracy
- · Accurate priming for OTC or Rx formulations
- All pharma-grade materials comply with European and U.S. regulations
- Compliant with the U.S. FDA nasal guidelines
- · Standard white color; other colors available upon request
- · Available with shipping clip for various sizes and outputs
- Available with protective hood for nasal adapters in custom colors
- Drug Master File (DMF #12223)

Closure Sizes

Many standard closure sizes

Output Range

0.050 to 0.180 ml



PFP N[™] (Preservative-free)

Key Features

- Full protection from microbiological contamination
- No silver spring, no oligodynamic components
- · Shut-off valve to avoid contamination
- Sterile air filter system for bottle venting; non-venting version also available
- Entire pump can be sterilized via gamma irradiation
- Finger flange and hood can be easily customized
- Standard white color, with clear and custom colors available
- All pharma-grade materials comply with European and U.S. regulations
- · Extensive reference list
- Drug Master File (DMF #23054)

Closure Sizes

Snap-on closure S20

Output Range

0.050 to 0.140 ml with customized intermediary outputs



Iridya[™] (Preservative-free)

Key Features

- · Preservative-free, multidose eye dropper
- Familiar squeeze-bottle dropper design
- · Consumer-preferred design validated by qualitative testing
- Elongated tip for ease of use and precision
- Tamper-evident tear-off strip
- Overcap for prolonged use and on-the-go lifestyles
- Low squeeze force
- · Controlled application for exact dosing
- · Compatible with most market formulations, from low to high viscosities
- Delivery system for both over-the-counter and prescription drugs
- Designed and challenge-tested for preservative-free formulations
- Drug Master File (DMF #34286)

Bottle Sizes and Makes

- 10 ml (standard), other sizes upon request
- White and transparent bottles available
- Senior-friendly soft material for low bottle squeeze force

Color Options

Diverse hood/overcap colors available

Outputs

25 to $45~\mu l$, depending on formulation Custom outputs available

Other Spray Solutions



HiMark[®]

Key Features

- Versatile product range with many options for outputs, closures and adapters
- Easily customized with numerous aesthetic options
- Topical, oral and nasal options available
- · Dose counter and safety clip options available
- Suitable for non-drip nasal sprays and other viscous formulations
- Wide output range with many options
- For aggressive products, alternative materials can be provided for critical pump components
- Child-resistant option available
- Drug Master File (DMF #28564)

Closure Sizes

Many standard closure sizes

Output Range

0.050 to 0.190 ml



Mark VII® Max

Key Features

- · Compatible with most high-viscosity formulations
- Spray and cream versions with excellent priming and smooth actuation
- · Natural gasket for invisibility in translucent closures
- Variety of closures, heads, hoods and orifice cups for maximum flexibility and compatibility across platforms and product lines
- Inverted version available for upside-down spraying
- Drug Master File (DMF #22653)

Closure Sizes

Ribbed: GL 20, 20-400 Smooth or ribbed: 20-410, 22-415, 24-410 Snap-on: GS 30, GS 31 Ferrule: 20 mm

Outputs

0.160, 0.210, 0.300 ml, 0.180 ml for inverted version

High-output Dispensers



Sprayette[™] IV

Key Features

- Pure Path™ technology for a metal-free fluid pathway
- Highly customizable with variety of output sizes and protective hoods
- · Higher-output large mist sprayer
- Exceptional performance with aggressive formulas
- Wide range of spray pattern options
- High discharge volume for oral and topical applications

Closure Sizes

24-410, 28-400, Snap-on S26

Output Range

0.350 to 0.700 ml



SD200°

Key Features

- · Intermediate output
- Advanced lock-down design
- Outstanding top-load support
- · Wide variety of head designs
- Range of options for packaging convenience and flexibility

Closure Sizes

Ribbed: 24-400

Smooth or ribbed: 24-410, 24-415, 28-410, 28-415

Outputs

2.0 ml

Foamers



Silgan Foamer Range

Key Features

- · Propellant-free foamers
- Handheld, table-top or squeeze gesture
- · Easy to actuate
- Broad customization options
- Complementary bottles with decoration options

Closure Sizes

30 mm, 40 mm, 43 mm

Output Range

0.4 to 1.5 ml

Triggers



TSSOO®

Key Features

- · Proven reliability and performance
- More than 30 spray-stream-foam nozzle configurations
- · Multiple shrouds, closures and actuators
- Reliable venting system
- High chemical compatibility

Closure Sizes

Many standard closure sizes

Outputs

0.65 ml, 0.90 ml, 1.30 ml

Airless Systems



Silgan Airless Range

Key Features

- Full range of airless packaging to dispense semi-solid formulas
- Protection against formula oxidation
- High restitution rate
- 360° dispensing
- Broad range of pump engines and complementary airless bottles or tubes

Bottle Volume

5 to 200 ml

Output Range

0.080 ml to 2.5 ml

Adapters

Nasal Applications



Round



Square



Oval



Mini



Ear Adapter



Shroud 20²



Hexagon



Elegant

Oral Applications



Throat Adapter Short



Throat Adapter Medium



Throat Adapter Medium + Protection



MTA5¹



Spray Extender²



Throat Adapter Long



Throat Adapter Articulated³



ATA 19



SATA Narrow

Topical Applications



Dispensing Head



Spray Head 16 mm



Spray Head with Capillary Tube⁴

Ophthalmic Applications



Spray Head 16 mm

All adapters fit on Mark II and MK with the below exceptions:

- ¹ MTA5 fits on HiMark
- ² Spray extender fits on Mark VII Max
- Throat adapter articulated-F on ferrule only
- Spray head on capillary tube on special request only





Elevating the experience worldwide

With our responsive global network and team, you get a partner that's committed to delivering better experiences that move your brand and business forward.

silgandispensing.com/our-locations