FibriJet®
Biomaterial Delivery Devices
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Nordson MEDICAL
Nordson MEDICAL is your partner in the global life sciences market providing innovative components, devices and custom OEM solutions for the precision management and delivery of fluids and biomaterials. The company has expanded through an aggressive strategy of product development and acquisition and has become a leader in developing products for the application of biomaterials and sterile fluids. Nordson MEDICAL products are sold across a wide variety of clinical specialties.

In 2010 Micromedics, Inc. was acquired by Nordson Corporation (NASDAQ: NDSN), one of the world’s leading producers of precision dispensing equipment that applies adhesives, sealants, coatings and other materials to a broad range of consumer, industrial and medical products. The company also manufactures equipment used in the testing and inspection of electronic components as well as technology-based systems for curing and surface treatment processes. Headquartered in Westlake, Ohio, Nordson has direct operations and sales support offices in more than 30 countries.

FibriJet® Biomaterial Applicators & Tips
The FibriJet line of biomaterial applicators and tips is the “gold standard” featuring proven designs of single use applicators and tips for the dispensing of single and multi-component biomaterial. Our biomaterial delivery systems offer modularity and flexibility to meet the needs of many surgical procedures.

FibriJet biomaterial applicators and tips are used to accurately control and dispense biomaterials such as tissue sealants, hemostats, and concentrated plasma gel to control bleeding, heal wounds, and other related medical procedures. Single and dual syringe applicators and an extensive line of interchangeable tips meet the particular needs of specific surgical procedures. FibriJet products dispense a single material or simultaneously dispense two materials to a localized treatment site with simple, one-handed operation.

Nordson MEDICAL products are manufactured in a ISO 13485 certified facility and are marketed to a wide variety of customers including distributors, surgeons, OEMs, hospitals, and outpatient clinics. All products can be private labeled or customized to meet your specific user requirements.

Contact us to learn more about our proprietary products and how we can customize a delivery solution for your biomaterial. www.nordsonmedical.com

Custom OEM Solutions
We will partner with you to deliver your next breakthrough idea.

With more than 30 years experience in providing OEM solutions to biomaterial manufacturers, we can provide the detailed support you need from idea to market.

Private Labels and Customization
FibriJet can be private labeled or customized to meet your needs. Contact us to learn how we can partner with you to develop a delivery system that meets your unique user requirements.
TEL: +1 (651) 452-1977
TOLL FREE in USA: (800) 624-5662
Applicator Assemblies (Dual Syringe)

FibriJet Applicator Assemblies allow controlled, simultaneous application of two materials in 11:1 or 1:1 ratios to a localized treatment site with a simple, one-handed operation.
Each sterile applicator assembly consists of two syringes, one syringe holder, and one plunger link. Applicator tips to deliver the biomaterial to a surgical treatment site are sold separately. All applicator (dual syringe) assemblies are compatible with FibriJet applicator tips unless specifically noted otherwise.

11:1 Ratio

These applicator assemblies allow controlled, simultaneous application of two materials in an 11:1 ratio.

SA-1001
Ratio Applicator Assembly, 11:1 Ratio
10 Per Box

1:1 Ratio

These applicator assemblies allow controlled, simultaneous application of two materials in a 1:1 ratio.

SA-3303
3cc Applicator Assembly, 1:1 Ratio
10 Per Box

SA-3305
5cc Applicator Assembly, 1:1 Ratio
10 Per Box

SA-3310
10cc Applicator Assembly, 1:1 Ratio
10 Per Box
A variety of interchangeable tips are available to meet the particular needs of specific surgical procedures.

Applicator Tips
Single Component Applicator Mixing Tips

Tips are designed for low viscosity materials that may require extended mixing. Longer length enables access to hard-to-reach treatment sites. The tips can be combined with the SA-3670 blending connector for added versatility.

SA-3646
Single Channel Mixing Tip, Angled 45°, Low Viscosity
15 cm, Stream Output
Compatible with SA-3670 (sold separately)
10 Per Box

Single Component Applicator Spray Tips

Designed to spray biomaterials to open-field, topical, or endoscopic treatment sites. Single spray tips conveniently secure to a standard luer-type syringe. Single cannula extended applicator tips are available in 10 cm, 20 cm, and 30 cm lengths. Includes one single cannula extended applicator tip, tip alignment tool, and two spray tips.

SA-3647
Single Cannula, Extended, 15° Angle Tip
10 cm, Markings to 9 cm, Fine Spray Output
5 Per Box

SA-3648
Single Cannula, Extended
20 cm, Fine Spray Output
5 Per Box

SA-3649
Endoscopic, Single Cannula, Extended
30 cm, Fine Spray Output
5 Per Box

Minimum order quantities may apply • Volume pricing may be available, quantities vary
Dual Component Applicator Tips

Endoscopic/Laparoscopic Spray Tips

The variety of designs offers surgeons the best instrument choice for the procedure, and the luer lock system prevents accidental dislodging of applicator tips. Dual cannula styles are designed to resist clogging. Tips fit all standard FibriJet Applicator Syringe Assemblies (sold separately) unless specifically noted otherwise. All endoscopic tips are designed for use with 5 mm laparoscopic trocars.

Flexible 360° Gas-Assisted Tip

This unique tip facilitates the application of two liquid biomaterials to laparoscopic and hard-to-reach surgical sites. The tip can spray in any direction and applies a thin layer of combined materials. The sterile set includes an endoscopic applicator tip, tear apart tubing for gas inlet and vent tubing with filters. NOTE: Tip is fixed (not-replaceable) for the SA-3668. A FibriJet vented CO2 gas regulator (i.e., SA-6045) is also required (sold separately).

SA-3668
Endoscopic, 360° Gas Assisted Spray Set
35 cm, Sprays in any direction, Fine Spray Output
5 Per Box

Custom OEM Solutions

While we pride ourselves on our extensive product offering, we recognize that your needs are ever-changing and that our products, too, must adapt to your needs. We can partner with you to develop a delivery system that meets your unique user requirements.

See page 3 for more information about how we can provide you detailed support from idea to market.
Endoscopic/Laparoscopic Spray Tips

The variety of designs offers surgeons the best instrument choice for the procedure, and the luer lock system prevents accidental dislodging of applicator tips. Dual cannula styles are designed to resist clogging. Tips fit all standard FibriJet Applicator Syringe Assemblies (sold separately) unless specifically noted otherwise. All endoscopic tips are designed for use with 5 mm laparoscopic trocars.

Rigid Dual Cannula Gas-Assisted Tips (1:1 Ratio)

Gas-Assisted Endoscopic tips mix and dispense a thin layer of combined materials to endoscopic treatment sites. Sets include an endoscopic applicator tip, tear-apart gas inlet and vent tubing with filters, tip alignment tool, and two spray tips. A FibriJet vented CO2 gas regulator (i.e., SA-6045) is also required (sold separately). Extra spray tips are also available (sold separately as SA-3659). Sets come in a 1:1 ratio design.

SA-3654
Endoscopic, Gas Assisted Spray Set, 1:1 Ratio
30 cm, Fine Spray Output
Includes tip alignment tool and two spray tips
5 Per Box

SA-3655
Endoscopic, Gas Assisted Spray Set, 1:1 Ratio
40 cm, Fine Spray Output
Includes tip alignment tool and two spray tips
5 Per Box
Dual Component Applicator Tips

Endoscopic/Laparoscopic Spray Tips

The variety of designs offers surgeons the best instrument choice for the procedure, and the luer lock system prevents accidental dislodging of applicator tips. Dual cannula styles are designed to resist clogging. Tips fit all standard FibriJet Applicator Syringe Assemblies (sold separately) unless specifically noted otherwise. All endoscopic tips are designed for use with 5 mm laparoscopic trocars.

Rigid Dual Cannula Gas-Assisted Tips (11:1 Ratio)

Gas-Assisted Endoscopic tips mix and dispense a thin layer of combined materials to endoscopic treatment sites. Sets include an endoscopic applicator tip, tear-apart gas inlet and vent tubing with filters, tip alignment tool, and two spray tips. A FibriJet vented CO2 gas regulator (i.e., SA-6045) is also required (sold separately). Extra spray tips are also available (sold separately as SA-3659). Sets come in an 11:1 ratio design.

SA-3657  
Endoscopic, Applicator with Mixing Tip, 11:1 Ratio  
30 cm, Fine Spray Output  
Includes tip alignment tool and two spray tips  
5 Per Box

SA-3658  
Endoscopic, Applicator with Mixing Tip, 11:1 Ratio  
40 cm, Fine Spray Output  
Includes tip alignment tool and two spray tips  
5 Per Box
Rigid Manual Spray Tips (1:1 Ratio)

Tips mix and dispense a thin layer of combined materials to endoscopic treatment sites. Sets include an endoscopic applicator tip, tip alignment tool, and two spray tips. Extra spray tips are available (sold separately as SA-3659). Sets come in a 1:1 ratio design.

SA-3662
Endoscopic, Applicator with Mixing Tip, 1:1 Ratio
30 cm, Fine Spray Output
Includes tip alignment tool and two spray tips
5 Per Box
Rigid Manual Spray Tips (11:1 Ratio)

Tips mix and dispense a thin layer of combined materials to endoscopic treatment sites. Sets include an endoscopic applicator tip, tip alignment tool, and two spray tips. Extra spray tips are available (sold separately as SA-3659). Sets come in an 11:1 ratio design.

**SA-3664**
Endoscopic, Applicator with Mixing Tip, 11:1 Ratio
20 cm, Fine Spray Output
Includes tip alignment tool and two spray tips
5 Per Box

**SA-3667**
Endoscopic, Applicator with Mixing Tip, 11:1 Ratio
40 cm, Fine Spray Output
Includes tip alignment tool and two spray tips
5 Per Box
Endoscopic/Laparoscopic Stream Tips

The variety of designs offers surgeons the best instrument choice for the procedure, and the luer lock system prevents accidental dislodging of applicator tips. Dual cannula styles are designed to resist clogging. Tips fit all standard FibriJet Applicator Syringe Assemblies (sold separately) unless specifically noted otherwise. All endoscopic tips are designed for use with 5 mm laparoscopic trocars.

Malleable Dual Cannula Stream Tips

Tip is designed to facilitate the mixing and application of dual component biomaterials by isolating the components until they passively mix at the treatment site. The malleable metal shaft can be bent or shaped to the surgeon’s preference.

SA-3620
Endoscopic, Dual Cannula, Malleable
20 ga x 26 cm (10.25 in), Stream Output
10 Per Box

Semi-Flexible Dual Cannula Stream Tips

Featuring a smooth atraumatic tip and semi-flexible shaft, this tip is for use in endoscopic and tunneling procedures.

SA-3650
Endoscopic, Dual Cannula Semi-Flexible
32 cm, Stream Output
10 Per Box
Dual Component Applicator Tips

Endoscopic/Laparoscopic Stream Tips
The variety of designs offers surgeons the best instrument choice for the procedure, and the luer lock system prevents accidental dislodging of applicator tips. Dual cannula styles are designed to resist clogging. Tips fit all standard FibriJet Applicator Syringe Assemblies (sold separately) unless specifically noted otherwise. All endoscopic tips are designed for use with 5 mm laparoscopic trocars.

Flexible Dual Cannula Stream Tips
Tip designed to conform to tortuous paths and to allow for smooth movement through the 2 mm instrument channel of flexible endoscopes.

SA-3684
Endoscopic, Flexible Catheter, Dual Cannula 1.9 mm OD
180 cm, Stream Output
Can be used with SA-3445 (sold separately)
10 Per Box

Custom OEM Solutions
While we pride ourselves on our extensive product offering, we recognize that your needs are ever-changing and that our products, too, must adapt to your needs. We can partner with you to develop a delivery system that meets your unique user requirements.

See page 3 for more information about how we can provide you detailed support from idea to market.
Topical/Open-Field/Shallow Spray Tips

Offer maximum versatility by providing multiple options for spraying an assortment of materials to topical or open-field procedures. Fit all standard FibriJet applicator assemblies (sold separately) unless specifically noted otherwise. This tip is designed to apply two liquids simultaneously to a treatment site. FibriJet spray tips allow for the controlled, simultaneous application of two biomaterials in 11:1 or 1:1 ratios to a treatment site with simple, one-handed operation.

Manual Spray Tips

Mix and disperse combined materials in a thin layer to a topical, open-field, or shallow treatment site. The spray output is adjustable from coarse to fine droplet size.

**SA-3660**
Topical, Dual Spray Tip
Also available with an 11:1 syringe included (SA-1060) or as part of a procedure kit (SA-4460)
10 Per Box

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**SA-1060**
Applicator with Dual Spray Tips, 11:1 Ratio
11:1 dual syringe and topical dual spray tip included
10 Per Box

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**SA-3674**
Blending Connector with Single Spray Tip
Includes two spray tips per device
Additional replacement spray tips also available (SA-3671 and SA-3671-100)
10 Per Box

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**SA-3675**
Topical, Mixing Applicator with Spray Tip
Includes one spray tip, Low Viscosity
3 cm, Conical Spray Output
10 Per Box
**Dual Component Applicator Tips**

**Topical/Open-Field/Shallow Spray Tips**

Offer maximum versatility by providing multiple options for spraying an assortment of materials to topical or open-field procedures. Fit all standard FibriJet applicator assemblies (sold separately) unless specifically noted otherwise. This tip is designed to apply two liquids simultaneously to a treatment site. FibriJet spray tips allow for the controlled, simultaneous application of two biomaterials in 11:1 or 1:1 ratios to a treatment site with simple, one-handed operation.

**Gas-Assisted Spray Tips**

Mix and disperse combined materials in a thin layer to a topical, open-field, or shallow treatment site. Intended for use with inert gases only. The spray output is adjustable from coarse to fine droplet size in the gas-assisted spray sets. Sets include a spray tip and gas inlet tubing with a sterile filter. The non-vented/topical gas regulators are required (sold separately).

**SA-3651**

Topical, Gas Assisted Spray Set, Procedure Kit

Designed to be a clog resistant spray tip. Also available as part of a procedure kit (SA-6111).

*5 Per Box*

**SA-3652**

Topical, Gas Assisted Mix and Spray Set

Includes tip alignment tool and two spray tips

*5 Per Box*
Dual Component Applicator Tips

Topical/Open-Field/Shallow Stream Tips

Offer maximum versatility by providing multiple options for spraying an assortment of materials to topical or open-field procedures. Fit all standard FibriJet applicator assemblies (sold separately) unless specifically noted otherwise. A variety of tips designed to facilitate blending or mixing of dual component biomaterials. All tips dispense in a stream.

SA-3670
Blending Connector
Compatible with SA-3646, SA-3671, and SA-3671-100
10 Per Box

SA-3673
Blending Connector with Single Flexible Cannula
18 ga x 5 cm
10 Per Box

SA-3690
Single Cannula, Wire-Reinforced, Malleable
(.125 in) ID x 7.6 cm (3.00 in)
10 Per Box

SA-3677
Mixing Applicator Tip, High Viscosity
3 cm, Stream Output
10 Per Box

SA-3678
Blending Connector with Mixer, Low Viscosity
10 cm
Compatible with SA-3671 and SA-3671-100 (sold separately)
10 Per Box

Minimum order quantities may apply. Volume pricing may be available, quantities vary.
Dual Component Applicator Tips

Topical/Open-Field/Shallow Dual Cannula Stream Tips

Designed to facilitate the mixing and application of dual component biomaterials by isolating the components until they passively mix at the treatment site. The malleable metal shaft on these tips can be bent or shaped for better access to the treatment site. The dual channel is designed to resist clogging. Multiple lengths and gauges accommodate a variety of treatment sites. Tips dispense in a stream.

SA-3600
Dual Cannula, Malleable
16 ga x 10 cm (4 in), Stream Output
10 Per Box

SA-3605
Dual Cannula, Malleable
26 ga x 6 cm (2 in), Stream Output
10 Per Box
Topical/Open-Field/Shallow Dual Cannula Stream Tips

Designed to facilitate the mixing and application of dual component biomaterials by isolating the components until they passively mix at the treatment site. The malleable metal shaft on these tips can be bent or shaped for better access to the treatment site. The dual channel is designed to resist clogging. Multiple lengths and gauges accommodate a variety of treatment sites. Tips dispense in a stream.

SA-3610
Dual Cannula, Malleable
26 ga x 8 cm (3 in), Stream Output
10 Per Box

SA-3615
Dual Cannula, Malleable
20 ga x 5 cm (2 in), Stream Output
10 Per Box

SA-3618
Dual Cannula, Malleable
20 ga x 10 cm (4 in), Stream Output
10 Per Box

SA-3619
Dual Cannula, Malleable
20 ga x 18 cm (7 in), Stream Output
10 Per Box
Dual Component Applicator Tips

Topical/Open-Field/Shallow Dual Cannula Stream Tips

Designed to facilitate the mixing and application of dual component biomaterials by isolating the components until they passively mix at the treatment site. The malleable metal shaft on these tips can be bent or shaped for better access to the treatment site. The dual channel is designed to resist clogging. Multiple lengths and gauges accommodate a variety of treatment sites. Tips dispense in a stream.

SA-3625
Dual Cannula, Malleable
20 ga x 9.7 cm (3.8 in), Stream Output
Narrower than FibriJet’s standard center-to-center dual syringe spacing.
*Not compatible with FibriJet syringe assemblies.
Contact a Nordson MEDICAL Sales Representative for dual syringe compatibility information.
10 Per Box

SA-3626
Dual Cannula, Malleable
20 ga x 17.4 cm (6.8 in), Stream Output
Narrower than FibriJet’s standard center-to-center dual syringe spacing.
*Not compatible with FibriJet syringe assemblies.
Contact a Nordson MEDICAL Sales Representative for dual syringe compatibility information.
10 Per Box
Other Applicator Tips/Accessories

Single Component Spray Tips

Tips easily attach to any luer-style syringe to spray liquid.

**SA-3671**
Topical, Single Spray Tip  
Conical Spray Output  
10 Per Box

**SA-3671-100**
Topical, Single Spray Tip (Box of 100)  
Conical Spray Output  
100 Per Box

Endoscopic Catheter Introducer

Designed to aid in the insertion of a device (i.e. SA-3684) into a body cavity. Not intended for introduction into blood vessels.

**SA-3445**
Endoscopic Catheter Introducer  
Can be used with SA-3684  
40 cm  
3 Per Box

Tip Alignment Tool with Two Replacement Tips

Additional replacement spray tips that are compatible with many FibriJet products (listed below). Includes a tip alignment tool and two spray tips per pouch.

**SA-3659**
Tip Alignment Tool with Two Spray Tips  
Additional replacement tips for: SA-3647, SA-3648, SA-3649, SA-3662, SA-3664, SA-3667, SA-3654, SA-3655, SA-3657, SA-3658, SA-3652  
10 Pouches (20 Spray Tips) Per Box
Gas Regulators facilitate the use of gas assisted applicator tips.
FibriJet Vented Regulators are designed for use with our endoscopic gas-assist biomaterial applicators. FibriJet Vented Regulators control flow of medical grade CO2 for applying materials in endoscopic surgical procedures. Designed for use with insufflators, the patient vent allows for gas escape at the same rate as gas entry. The instrument panel is easy to read. Quick connect luer fittings ensure correct setup. The foot pedal allows for easy on/off of gas flow during procedures. Device includes an adjustable pole clamp, so the device can be used on multiple surfaces.

**SA-6045**
FibriJet Vented CO2 Regulator with Vent and Pole Clamp for Laparoscopic Procedures
1 Per Box
Non-Vented/Topical Regulators

Designed for use with our topical/open-field gas-assist biomaterial applicators. FibriJet Regulators control pressure of medical grade inert gases/CO2 for applying materials in topical and open-field surgical procedures. The instrument panel is easy to read. A quick connect luer fitting ensures correct setup. The foot pedal allows for easy on/off of gas flow during procedures. An optional adjustable pole clamp is also available for purchase separately.

SA-6030
FibriJet Topical Regulator, DISS
Medical Air Connection
1 Per Box

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Non-Vented/Topical Regulators

SA-6031
FibriJet Topical Regulator, DISS
Carbon Dioxide (CO2) Connection
1 Per Box

Optional Accessories

SA-6040
FibriJet Regulator Pole Clamp for SA-6030
1 Per Box
Procedure kits simplify and streamline setup for the application of liquid biomaterials by providing ease-of-use, convenience and efficiency in one package.
SA-4400
Applicator Procedure Kit, 11:1 Ratio
5 Per Box

Each sterile kit includes:
• Two FibriJet 11:1 applicator assemblies
  (four syringes, two syringe holders, two plunger links)
• One procedure tray
• Three removable med cups with lids and labels
• Applicator tips sold separately

SA-4460
Our most popular kit!
Dual Spray Applicator Procedure Kit, 11:1 Ratio
5 Per Box

Each sterile kit includes:
• Two FibriJet 11:1 applicator assemblies
  (four syringes, two syringe holders, two plunger links)
• One procedure tray
• Three removable med cups with lids and labels
• Two dual spray tips (SA-3660)
Procedure Kits

SA-6111
Gas-Assisted Procedure Kit, 11:1 Ratio
5 Per Box

Each sterile kit includes:
• One FibriJet 11:1 applicator assembly
two syringes, one syringe holder, one plunger link
• Gas-assisted spray tip (SA-3651)
• Gas inlet tubing with sterile filter
• One procedure tray
• Three removable med cups with lids and labels
• NOTE: Gas regulator required, sold separately
ORDERING INFORMATION

FibriJet® Biomaterial Delivery Devices.
For more information or samples, call 800-624-5662 or visit us online at nordsonmedical.com.

Nordson MEDICAL is the partner of choice for biomaterial delivery devices with innovative development and design expertise, comprehensive global regulatory support, and broad manufacturing and packaging capabilities. For over 30 years, Nordson MEDICAL has been a global provider of innovative products and has earned a solid reputation for quality, service and reliability. All of our products and services are backed by Nordson Corporation, a global leader in precision dispensing equipment serving many consumers and industrial manufacturing industries, helping customers succeed.