



# TECHSPRAY®



## Maintenance



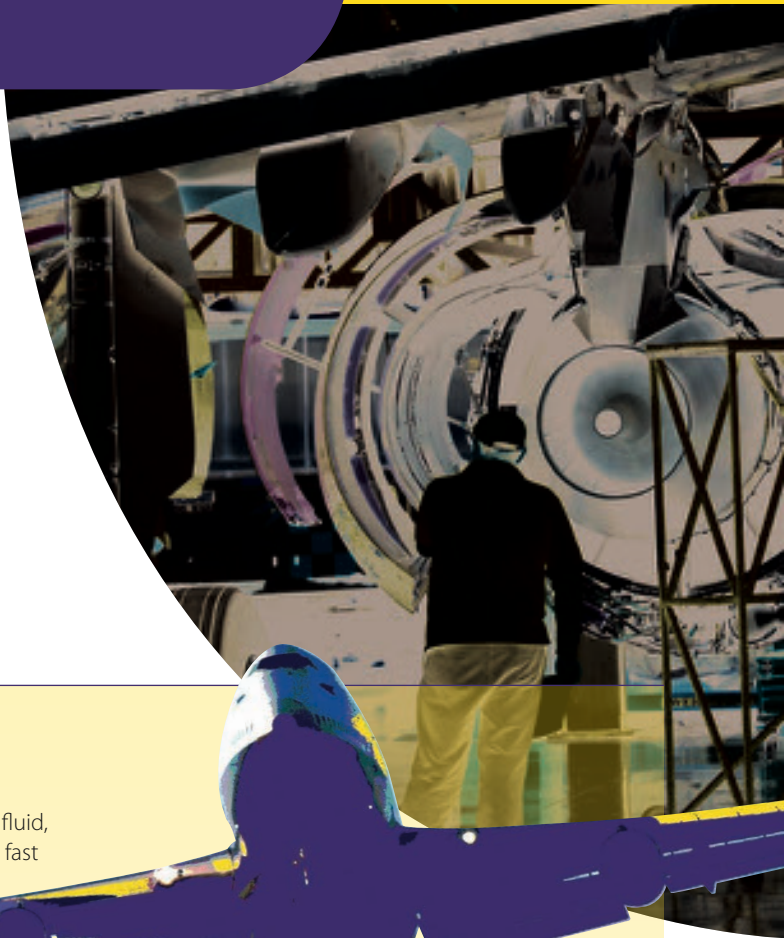
## Avionic Repair

## MAINTENANCE

Techspray aviation maintenance cleaners improve performance, efficiency and safety for degreasing, contact cleaning, and aircraft surface cleaning. Clean and maintain corrosion-prone areas like exhaust trail areas, battery compartments and vents, bilge areas, landing gear, cooling vents, wing flap and more.

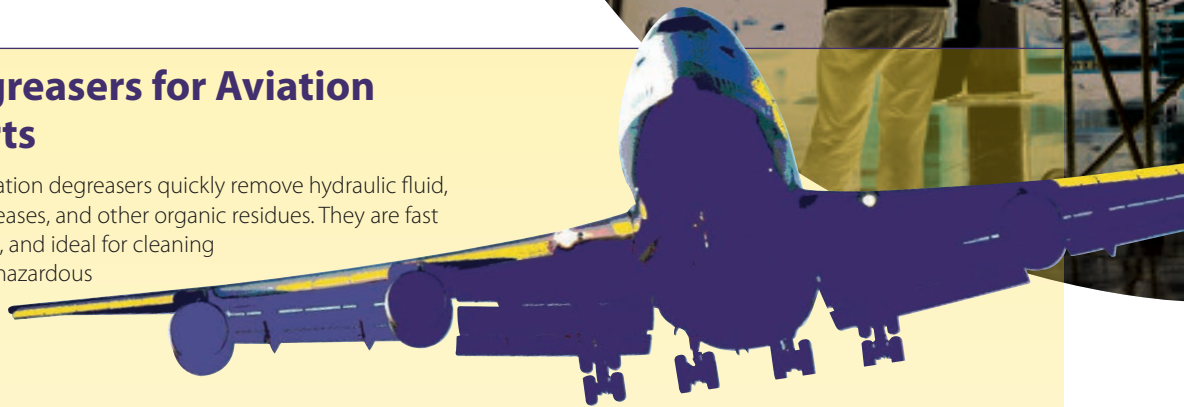
### SAFETY IS THE TOP PRIORITY

Techspray degreasers and contact cleaners are ideal replacements for highly toxic solvents like nPB, TCE and Perc. Greater safety without compromising cleaning performance!



## Specialized Degreasers for Aviation and Aircraft Parts

These specially engineered aviation degreasers quickly remove hydraulic fluid, fuel oils, lubricating oils and greases, and other organic residues. They are fast evaporating, quick penetrating, and ideal for cleaning aviation parts. Both are free of hazardous air pollutants (HAPs), and CARB compliant.



### Aviation Degreaser

*Exceptional nonflammable cleaner for aircraft parts degreasing*

**2851-20S** 20 oz (567g) aerosol

Specifications:

Meets Airbus UK ABR9-0140 General Purpose Cleaning Solvent,  
FedEx CPN 0311737,  
Boeing D6 17487, Rev T



- Nonflammable
- Fast evaporation
- Zero residue
- Non-ozone depleting
- Does not contain n-propyl bromide
- Dielectric breakdown of 13.7 kV
- CARB compliant

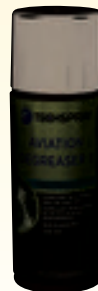
### Aviation Degreaser II

*NESHAP compliant cleaner for removing hydraulic and lubricating fluids*

**1647-16S** 16 oz. (454g) aerosol

Specifications:

Boeing D6 17487, Rev T,  
NESHAP 63.741-753



- Nonflammable
- Low VOC / NESHAP compliant
- Fast evaporation
- Zero residue
- Non-ozone depleting
- Does not contain n-propyl bromide
- Dielectric breakdown of 11.9 kV
- CARB compliant





## Degreasers



### Maintenance Cleaner

Blasts away oil and contaminants off of contacts, printed circuit boards, barcode instruments, switch boxes, gear boxes, and electronic motor controllers. Grease and oil flow right off, reducing the time and materials needed to scrub off stubborn soils.

- Nonflammable
- Much safer than most common industrial solvents — TCE, nPB, Perc & Methylene Chloride
- Powerful cleaner — Ideal for degreasing and contact cleaning
- Available in aerosol or bulk for vapor degreasing, ultrasonic and immersion cleaning
- Rapid evaporation
- Non-ozone depleting
- Cleaning applications: electronics, relays, switches & breakers, transformers, and electric motors and generators

<b>3400-20S</b>	20 oz. (567g) aerosol
<b>3400-G</b>	1 gal. (3.8L) pail
<b>3400-5G</b>	5 gal. (18.9L) pail
<b>3400-54G</b>	54 gal. (204L) drum



3400-G

3400-20S



### Blue Shower Maintenance Cleaner

*Nonflammable, powerful cleaner*

Clean oil and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, gear relays, and electronic motor controllers.

<b>1630-16S</b>	16 oz. (454g) aerosol
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- Nonflammable
- Powerful cleaner
- Rapid evaporation
- Non-ozone depleting
- Dielectric strength – 27.3 kv

Specification:  
Boeing D6 17487, Rev T



### Universal Cleaner

*Nonflammable, powerful liquid cleaner*

Engineered to remove oils, fluxes and other contamination using a manual soak cleaning process or ultrasonic equipment.

<b>1638-G</b>	1 gal. (3.8L) pail
<b>1638-5G</b>	5 gal. (19L) pail



1638-G

1638-5G

- Nonflammable
- Powerful cleaner
- Effective as maintenance cleaner and flux remover
- Rapid evaporation
- Non-ozone depleting
- Dielectric strength – 27.3 kv



## Degreasers



### Blue Shower Maintenance Cleaner

*Powerful and economical aerosol cleaner*

Clean oil and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, gear boxes, and engines.

**1620-10S** 10 oz. (284g) aerosol



- Powerful cleaner
- Ideal for sensitive plastics
- Low toxicity
- Non-ozone depleting

## Contact Cleaners



### Contact Cleaner

*Nonflammable, powerful contact cleaner*

Clean oxidation, oil, and other contaminants from contacts, metal switches, relays, edge connectors, buss bars, and circuit breakers.

**1632-16S** 16 oz. (454g) aerosol



- Nonflammable
- Powerful cleaner
- Rapid evaporation
- Non-ozone depleting
- Dielectric strength – 36.2 kv

Specifications:  
Boeing D6 17487, Rev T  
Boeing Aircraft 127713



### Contact Cleaner

*Powerful and economical electronic contact cleaner*

Clean oxidation, oil, and other contaminants from contacts, metal switches, relays, edge connectors, buss bars, and circuit breakers.

**1622-10S** 10 oz. (284g) aerosol

**1622-13S** 13 oz. (369g) aerosol



1622-10S



1622-13S

- Powerful cleaner
- Ideal for sensitive plastics
- Low toxicity
- Non-ozone depleting

## Adhesive

### Heavy-Duty Adhesive

*Strong, fast tacking adhesive*

Ideal for cabin equipment manufacturing and repairs like cabin seating, minor carpet repairs, and repairing decorative cabin upholstery.

**3500-11S** 12 oz. (340g) aerosol



3500-11S

- High strength
- Fast tacking
- Water resistant
- Non-wrinkling



## Vapor Degreaser Solvents

Techspray offers a wide variety of vapor degreaser formulas engineered to meet challenging requirements like cleanliness specifications, difficult-to-clean soils, solvent-sensitive materials, and restrictive regulations.

All Techspray solvents have azeotropic properties that allow them to remain stable as they are cycled in a vapor degreaser. They are not reactive or corrosive to metals commonly found in the construction of vapor degreasers.

PWR-4™ solvents are designed to replace nPB, TCE and Perc, matching and surpassing cleaning performance without the safety concerns.

Precision-V™ vapor degreaser solvents are ideal replacements for AK-225 based cleaners, which were phased out due to the ozone depletion restrictions of the Montreal Protocol.

To order, add the following to the part # shown in the chart below:

-1G for 1 gal. (3.8L)

-5G for 5 gal. (19L)

-54G for 54 gal. (205L)



1 gallon



5 gallons



54 gallons

Part #	Product Name	Base Solvents	kB value	Boiling Point (°F/°C)	VOC (g/l)	GWP	Degreasing	Defluxing	Plastic-Safe
1654	VC-1200	DuPont Vertrel® XF	56	94/34	552	684	●		
1655	VC-1500	DuPont Vertrel® XF	62	90/32	562	663		●	
1656	VC-1600	DuPont Vertrel® XF	100	106/41	1063	264		●	
1686	ME-1500	3M Novec 7100/7200	58	104/40	889	43	●	●	
1680	AE-1000	Asahi AE3000	~0	133/56	ND	540			●
1681	AE-1400	Asahi AE3000	ND	139/54	ND	540	●	●	●
3400	PWR4 Maintenance Cleaner	3M Novec 7100	100	118/48	1201	ND	●		
3401	PWR4 Flux Remover	3M Novec 7100	100	118/48	1201	ND		●	

ND=Not Defined

## Liquid Oxygen Validation Solvent

For cleaning and validation of Oxygen Systems Hardware

- Very low non-volatile residue for maximum performance and safety
- No ozone depleting chemicals, low global warming potential
- Azeotropic composition provides excellent composition stability
- Low toxicity
- Fast drying

**2996-G** 1 gal. (3.8L) bottle



### Applications:

- Designed for use in oxygen system cleaning
- Cleaning solvent for critical cleaning applications
- Removes particulates and debris
- Removes fluorocarbon greases and oils used to lubricate fittings

Specifications: meets SAE ARP1176, evaluated and tested in NASA/TP-2015-218207





## Isopropyl Alcohol (IPA)

Techspray has the broadest line of isopropyl alcohol (IPA) in the industry, ranging from aerosol, pre-saturated wipes, and bulk packaging. Two grades of IPA are available: 99.8% anhydrous (containing as little water as possible) for fast-drying cleaning and 70% IPA / 30% DI for stencil and other cleaning when slower evaporation is desired.



### 70% Bulk – Cleaning Grade IPA

**1608-G4** 1 gal. (3.8L) container

### 99.8% Bulk – Technical Grade IPA

**1610-P** 1 pt. (473mL) bottle

**1610-G4** 1 gal. (3.8L) bottle sold only 4/cs

**1610-5G** 5 gal. (19L) container

**1610-54G** 54 gal. (205L) drum

Specs: 99.8% IPA filtered to 0.2 microns, fed spec TT-1-735A (amend 3, notice 2) grades A&B, ASTM D770-05



1608-G4

1610-5G

1610-P

### Pop-up Tubs

- 5"x8" (127mm x 203mm) wipes
- 100 wipes/tub
- Lint-free, tear resistant polyester

#### 70% IPA Wipes

**1608-100DSP** 100 wipes in Disposable Tub

**1608-100FL** 100 wipes in Flip-Top Tub

**1608-100R** 100 wipes refill roll

#### 99.8% IPA Wipes

**1610-100DSP** 100 wipes in Disposable Tub

**1610-100FL** 100 wipes in Flip-Top Tub

**1610-100R** 100 wipes refill roll



Disposable Tubs

1610-100DSP

1608-100DSP

Spring-loaded lid automatically closes

Sealed top reduces waste from dry-out

1610-100FL

Flip-Top Tubs

Refill Roll

### Individually Wrapped Wipes

- 99.8% pure IPA
- 5.5"x5.5" (140mm x 140mm) wipes
- 50 wipes/box
- Lint-free, tear resistant poly-cellulose

**1610-50PK**



### E-Line IPA Electronics Cleaner

**99.8% IPA in convenient aerosol package**

- 99.8% pure IPA
- Compliant with SCAQMD rule 1171
- Plastic safe
- Low toxicity
- Non-ozone depleting
- NSF registered K1, K2

**1610-12S** 12 oz. (340g) aerosol

Specifications for 99.8% IPA: Fed spec TT-1-735A (amend 3, notice 2) grades A&B, ASTM D770-05



## Dusters

### Nonflammable Duster

*Nonflammable, 100% HFC-134a duster*

- 1671-10S** 10 oz. (283g) aerosol
- 1671-15S** 15 oz. (425g) aerosol
- NSN 6830-01-335-9925



- Nonflammable
- Safest choice for energized equipment
- Velocity – 11.3 M/s

Specifications:  
Fed Spec A-A-58060  
ARI Standard 700, App. C

### Vortex™ High Velocity Duster

*High velocity, 100% HFC-134a duster*

- Most powerful blast
- Nonflammable
- Safest choice for energized equipment
- Vortex 360° sprays upside-down
- Velocity – 14.6 m/s

- 1697-8S** Vortex 360° 8 oz. (227g) aerosol

Specifications:  
Fed Spec A-A-58060  
ARI Standard 700, App. C



### Renew-Duster

- GWP less than 1/100th of HFC-134a
- Nonflammable
- Non-ozone depleting
- Velocity – 12 m/s

- 1580-10S** 10 oz. (283g) aerosol



## General Purpose Cleaners



### Eco-Shine™ Glass & Surface Cleaner

*Eco-friendly, nonflammable, streak-free glass cleaner*

Cleans glass, stainless steel, chrome, mirrors, tile, plastic, ceramic and enamel and leaves a streak-free finish.

- 1505-QT** 1 qt. (0.95L) w/ trigger sprayer
- 1505-G** 1 gal. (3.8L) jug



1505-QT

- Streak-free
- Nonflammable
- Non-ammoniated – safe on sensitive surfaces
- Low VOC, no GWP
- Non-ozone depleting
- NSF registered K1, K2

### Glass Cleaner

*Foaming aerosol glass and surface cleaner*

- 1625-18S** 18 oz. (510g) aerosol



- Foaming action
- Streak-free
- Safe on glass & plastics
- Nonflammable

### Label & Adhesive Remover

*Fast acting, citrus-based label and adhesive remover*

Citrus-based solvent safely and effectively removes labels and adhesive gums off equipment and products. Penetrates quickly and allows label to be peeled off without gummy residue.

- 1613-6S** 4.5 oz. (128g) aerosol



- Removes labels and adhesive without scraping
- Penetrates rapidly
- Citrus-based solvent
- Safe on most plastics

*Note: Not available in California*

## AVIONIC REPAIR

Techspray products clean and maintain sensitive avionics to prevent corrosion, and ensure reliability of controls, sensors, displays, touch panels, communication and other critical systems. Flux removers quickly and safely blast off corrosive flux residues. Freeze spray helps diagnose faulty components and solder joint. Techspray desoldering braid and TraceTech™ PCB repair products give you the capability to easily remove faulty components and perform trace repair without unsightly and unreliable jumpers. With Techspray, you can repair circuit boards and replace faulty components instead of replacing whole modules.



## Solvent Defluxers



### Flux Remover

*Strong and fast-acting flux remover*

Remove flux residues and other contaminants left by manufacture, rework, or repair of printed circuit boards.

**1631-16S** 16 oz. (454g) aerosol

**1631-16SB** 16 oz. (454g) aerosol w/brush attachment



- Nonflammable
- Powerful cleaner
- Proven effective for lead-free processes
- All-in-one cleaner and defluxer
- Rapid evaporation
- Non-ozone depleting



### Flux Remover & Maintenance Cleaner

*Powerful and economical flux remover*

Hydrocarbon-based defluxer formulated to be powerful, yet very economical. Eliminates brushing and scrubbing, saving time and materials.

**1621-10S** 10 oz. (283g) aerosol

**1621-G** 1 gal. (3.8L) can



- Powerful cleaner
- Proven effective for lead-free processes
- Ideal for sensitive plastics

## Conformal Coatings



*Acrylic Conformal Coating*

Coverage (1 mil dry film):

1 aerosol can - 14 ft<sup>2</sup> (1.3 M<sup>2</sup>)

**2108-12S** 12 oz. (355ml) aerosol



- Fastest cure – dry to touch in 3 minutes!
- Low toxicity
- No Toluene, Xylene or MEK
- UL94 V-0 rated – nonflammable final coat
- Fast & easy rework & repair
- UV indicator for black light QC inspection

Specifications: Meets or exceeds MIL-I-46058C  
Type AR and IPC-CC-830B. UL94 V-0 rated.

### FINE-L-KOTE™ UR

*Urethane Conformal Coating*

Coverage (1 mil dry film):

1 aerosol can - 10 ft<sup>2</sup> (0.9 M<sup>2</sup>)

**2104-12S** 12 oz. (355ml) aerosol

Specifications: Meets or exceeds MIL-I-46058C  
Type UR and IPC-CC-830B. UL94 V-0 rated.



### FINE-L-KOTE™ HT

*High Temperature Silicone Conformal Coating*

Coverage (1 mil dry film):

1 aerosol can - 20 ft<sup>2</sup> (1.9 M<sup>2</sup>)

**2106-12S** 12 oz. (355ml) aerosol

Specifications: Meets or exceeds MIL-I-46058C  
Type SR and IPC-CC-830B. UL94 V-0 rated.







## Freeze Sprays

### Freeze Spray

#### Pure HFC-134a freeze Spray

- Chills down to -60°F (-51°C)
- Nonflammable
- Safe for energized equipment

**1672-10S** 10 oz. (283g) aerosol

**1672-15S** 15 oz. (425g) aerosol  
NSN 6850-01-406-1356

Specifications:

McDonnell Douglas 558



1672-10S

1672-15S

### Anti-Static Freeze Spray

#### ESD-Safe Diagnostic Freeze Spray

- Avoids static build-up
- Prevents latent failures
- Chills down to -60°F (-51°C)
- Nonflammable
- No frost buildup

**1747-10S** 10 oz. (283g) aerosol



### Eco-Freezer

#### Eco-Friendly Freeze Spray

- Chills down to -49°F (-45°C)
- GWP less than 1/100th of HFC-134a
- Nonflammable
- Non-ozone depleting

**1583-10S** 10 oz. (283g) aerosol



## ESD Products



### LICRON CRYSTAL

#### Permanent ESD Coating

- Rugged static dissipative coating
- Surface resistivity of  $10^6$  To  $10^9$  ohms
- Operating temperature range – up to 302°F (155°C)
- Humidity independent
- Superior adhesion to variety of surfaces: glass, plastic, etc.
- Non-ozone depleting

**1756-8S** 8 oz. (226g) aerosol (coats up to 200ft<sup>2</sup>)



### Zero Charge Mat & Tabletop Cleaner

#### Safe, effective cleaner for ESD mats

- Rejuvenates ESD-safe mats
- Will not dry out surfaces
- Leaves no insulative film
- Nonflammable
- No ammonia
- Non-corrosive

**1733-QT** 1 qt. (.95L) bottle with trigger sprayer

**1733-G** 1 gal. (3.8L) bottle



1733-QT

### Zero Charge Anti-Stat Coating

#### Anti-static coating for fabrics & flexible surfaces

- All-purpose static control
- For plastics, fabrics, and carpet
- Fast drying
- Nonflammable

**1726-QT** 1 qt. (.95L) bottle with trigger sprayer  
NSN 6850-01-324-4682



### Zero Charge Hand Lotion

#### Non-contaminating hand lotion for ESD sensitive environments

- Improves wrist and heel strap contact
- Does not contain silicone or lanolin
- Non-contaminating — does not interfere with soldering
- Non-greasy

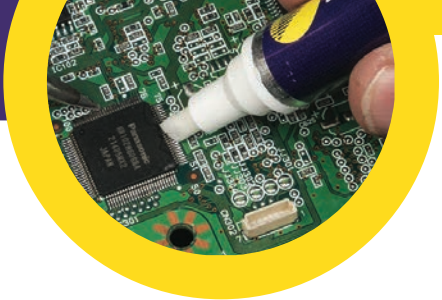
**1702-8FP** 8 fl. oz. (237ml) bottle with finger pump



Specifications:

MIL-B-81705B





Avionic Rework & Repair Pens

For fast, easy rework and repair of avionics.

- 2505-N **Conductive Pen**, 4.9ml Silver ink for repairing traces
- 2506-N **Flux Remover Pen**, 11.5ml for spot cleaning
- 2507-N **No-Clean Flux Dispensing Pen**, 11.5ml convenient flux dispenser for soldering
- 2509-GN **Green Overcoat Pen**, 5ml for repairing solder resist
- 2510-N **Conformal Coating Remover Pen**, 10ml spot coating remover
- 2510-P **Conformal Coating Remover**, 1 pt. (0.47L)



Heat Sink / Transister Grease

Silicone Heat Sink Compound

Heat sink compound for electrical applications

1977-DP 4 oz. (118ml) squeeze tube



- Thermal conductivity – 0.70 W/m-K
- Functional temperature range -67°F to 401°F (-55°C to 205°C)
- Easy application
- Will not harden and crack

Silicone-Free Heat Sink Compound

Heat-sink for electronics, avoid silicone contamination

1978-DP 4 oz. (118ml) squeeze tube



- Thermal conductivity – 0.92 W/m-K
- Functional temperature range -40°F to 392°F (-40°C to 200°C)
- Avoid solder defects due to silicone contamination
- Easy application
- Will not separate, harden and crack

Desoldering Braid

Specifications: Meets or Exceeds MIL-F-14256; NASA NHB 5300, 4 (34-1); NASA NPC 200-4; NASA SP5002; 1821:HP 8690-0588; 1823: HP 8690-0577; IPC Standard-J-STD-004



Pro-Wick® Rosin — ESD-Safe Bobbin

For the fastest wicking action, rosin flux coated braid is ideal for high volume PCB production/repair environments.












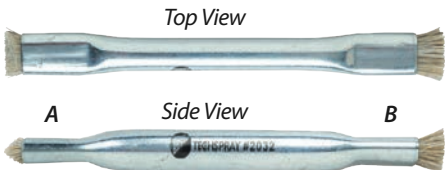


No-Clean Wick — ESD-Safe Bobbin

The cleanest No-Clean braid in the industry. The proprietary flux formula is specially designed to avoid catastrophic and latent PCB failures caused by ionic flux residue.

Size		5'	10'
1808	#1 White / .035" (0.9mm)	1808-5F	1808-10F
1809	#2 Yellow / .055" (1.4mm)	1809-5F	1809-10F
1810	#3 Green / .075" (1.9mm)	1810-5F	1810-10F
1811	#4 Blue / .098" (2.5mm)	1811-5F	1811-10F
1812	#5 Brown / .130" (3.3mm)	1812-5F	—
1813	#6 Red / .193" (4.9mm)	1813-5F	—

Size		5'	10'
1820	#1 White / .035" (0.9mm)	1820-5F	1820-10F
1821	#2 Yellow / .055" (1.4mm)	1821-5F	1821-10F
1822	#3 Green / .075" (1.9mm)n	1822-5F	1822-10F
1823	#4 Blue / .098" (2.5mm)	1823-5F	1823-10F
1824	#5 Brown / .130" (3.3mm)	1824-5F	—
1825	#6 Red / .193" (4.9mm)	1825-5F	—

## Brushes

FRONT VIEW	SIDE VIEW	Product	L Bristle Length	W Bristle Width	T Bristle Trim	Bristle Material	Handle Material	Handle Length
		<b>2020-1</b>	1.375" (35mm)	0.25" (6.4mm)	0.44" (11mm)	Horse Hair	Wood	7.75" (19.7cm)
		<b>2021-1</b>	1.375" (35mm)	0.25" (6.4mm)	0.44" (11mm)	Hog Bristle	Wood	7.75" (19.7cm)
		<b>2022</b>	2.125" (54mm)	0.875" (22mm)	0.75" (19mm)	Hog Bristle	Wood	8.375" (21.3cm)
		<b>2030-1</b>	0.125" (3.2mm)	0.0625" (1.6mm)	0.125" (3.2mm)	Goat Hair	Stainless Steel	3.5" (8.9cm)
		<b>2031-1</b>	0.25" (6.4mm)	0.19" (4.8mm)	<b>A</b> - 0.25" (6.4mm) <b>B</b> - 0.5" (13mm)	Horse Hair	Stainless Steel	4.5" (11.4cm)
		<b>2032-1</b>	0.5" (13mm)	0.375" (9.5mm)	<b>A</b> - 0.19" (4.8mm) <b>B</b> - 0.25" (6.4mm)	Horse Hair	Zinc Plated Steel	4.5" (11.4cm)
		<b>2033-1</b>	0.44" (11.2mm)	0.375" (9.5mm)	0.75" (19mm)	Horse Hair	Zinc Plated Steel	4.5" (11.4cm)

## TechSwabs

All swabs shown actual size – 1:1 scale


### Cotton TechSwabs

Product	Tip Width	Attachment of Tip	Handle Length	Handle Material	30 Pack Bag	100 Pack Bag	1000 Pack Bag
<b>2300</b>	0.1875" (4.8mm)	Wrapped	6" (15cm)	Wood	—	2300-100	2300-1000




### Foam TechSwabs

Product	Tip Width	Attachment of Tip	Handle Length	Handle Material	50 Pack Bag	1000 Pack Bag
<b>2302</b>	0.44" (11.2mm)	Heat Sealed	6" (15cm)	Polypropylene	2302-50	2302-1000



Cotton Bud Wrapped in Foam, Rigid Head

<b>2306</b>	0.5" (13mm)	Heat Sealed	5" (13cm)	Polypropylene	2306-50	2306-1000
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Rigid Head

For full selection of swabs and wipes, go to [www.techspray.com](http://www.techspray.com) or full line Techspray product catalog.



FOR MORE INFORMATION

## TECHSPRAY ANALYSIS & APPLICATION LAB

Techspray Application Lab offers a state-of-the-art cleaning and analytical services to help customers optimize their processes and as required, development customized solutions.

Cleaning equipment includes inline, batch, ultrasonic, and vapor degreasing systems.

### Services Include:

- Verify cleaning materials meet customer, industry and regulatory requirements
- Troubleshoot and optimize cleaning processes
- Identify most effective cleaner for specific application
- Compatibility testing for sensitive materials
- Ensure a safer work environment by helping with the move to less toxic solvents.

### Free Qualification Testing

Call us today for an on-site evaluation and consultation.



[www.techspray.com](http://www.techspray.com)



 **TECHSPRAY®**  
*Advanced Chemistries To Improve  
Your Products & Processes*

For more information and the full product line for electronics and general industry cleaning and coating, including:

- Aerosol, ultrasonic & vapor degreaser solvent cleaners
- PCB rework & repair products
- Full line of wipes, swabs & brushes

 **Contamination Control  
Electronics**

**Techspray - US Office**  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
678-819-1408  
800-858-4043  
[tsales@techspray.com](mailto:tsales@techspray.com)

**Techspray - European Office**  
ITW Contamination Control BV  
Saffierlaan 5, 2132 VZ Hoofddorp  
The Netherlands  
+31 88 1307 400  
[info@itw-cc.com](mailto:info@itw-cc.com)

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