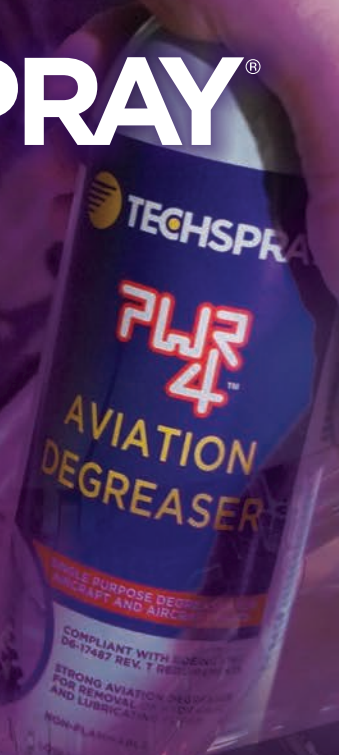




TECHSPRAY®



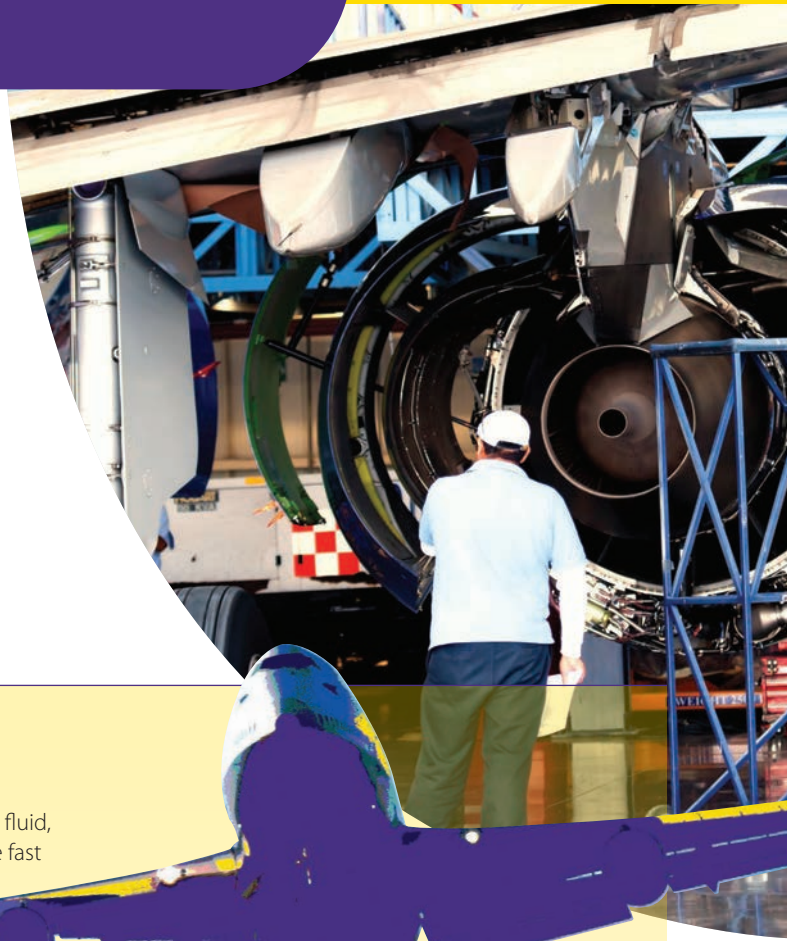
Maintenance



Avionic Repair

MAINTENANCE

Techspray aviation maintenance cleaners improve performance, efficiency and safety for degreasing, contact cleaning, and aircraft surface cleaning. Degreasers and contact cleaners remove a wide variety of soil, oil, grease, oxides, and baked-on lubricants. Formulas available to maximize cleaning power and comply with stringent environmental regulations. Clean and maintain corrosion-prone areas like exhaust trail areas, battery compartments and vents, bilge areas, landing gear, cooling vents, wing flap and more.



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

3400-20S 20 oz. (567g) aerosol

3400-G 1 gal. (3.8L) pail

3400-5G 5 gal. (18.9L) pail



3400-20S

3400-G



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.

1630-16S 16 oz. (454g) aerosol



- 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.

1638-G 1 gal. (3.8L) pail

1638-5G 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



Plastic-Safe Universal Cleaner

Plastic-safe, nonflammable cleaner for sensitive electronics

Plastic-safe formula is engineered for use on sensitive plastic components, packaging and casements. Ideal for optics cleaning, critical electronics and other sensitive surfaces. Qualifies under the aerospace NESHAP VOC guidelines.

1652-10S 10 oz. (283g) aerosol



- Nonflammable
- Low VOC
- Safe on sensitive plastics
- High precision – residue-free
- Rapid evaporation
- Non-ozone depleting

Specifications:
NESHAP 63.741-753



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

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.



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

Specifications:
 ACS reagent grade, fed spec TT-1-735A
 (amend 3, notice 2) grades A&B
 ASTM D770-05



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



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





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



1671-10S 1671-15S

- 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

Economy Duster

Economical HFC-152a duster

- Best value – 30% more volume
- Lower global warming potential – 10% of HFC-134a
- Velocity – 11.4 m/s

1673-10S 10 oz. (283g) aerosol

Note: not for use on powered electrical equipment, on hot surfaces, and around open flames or sparks.



General Purpose Cleaners



Zero-VOC General Purpose Cleaner

General purpose remover of adhesives and coatings

Ideal for heavy-duty degreasing and for removing paint, coatings and sticky adhesive residues. Because it is VOC-free, there are no VOC restrictions – even in southern California!

1611-P 1 pt. (473mL) can



- Pure acetone
- Ideal for removing inks & adhesives
- VOC exempt
- Low toxicity
- Fast evaporation
- Non-ozone depleting

Note: test first on plastics and painted surfaces to check for compatibility.

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



IPA Electronics Cleaner

99.8% IPA in convenient aerosol package

Ideal for defluxing, stencil cleaning and fiber optic connector cleaning.

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



- 99.8% pure IPA
- Compliant with SCAQMD rule 1171
- Plastic safe
- Low toxicity
- Non-ozone depleting

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



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



Flux Remover & Maintenance Cleaner

Nonflammable and powerful precision cleaner

Clean off flux residues, oil, and other contamination from electronics and other sensitive surfaces.

- 1651-16S** 16 oz. (454g) aerosol
- 1651-G** 1 gal. (3.8L) pail
- 1651-5G** 5 gal. (19L) pail



- Nonflammable
- Low VOC
- Safe on most plastics
- High precision – residue-free
- Rapid evaporation
- Non-ozone depleting



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

Anti-Static Freeze Spray

ESD-Safe Diagnostic Freeze Spray

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



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

ESD Products

LICRON CRYSTAL

Permanent ESD Coating

- Rugged static dissipative coating
- Surface resistivity of 10⁶ To 10⁹ 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 200ft²)



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



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

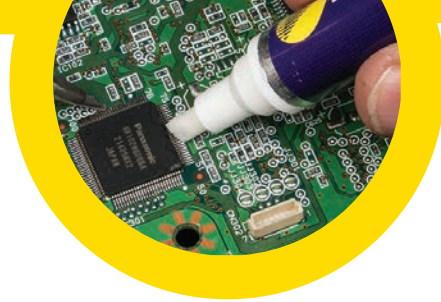
Non-contaminating hand lotion for ESD sensitive environments

- 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



Rework & Repair Pens

TraceTech[™]

Flux Remover Pen

Spot cleaning for PCB rework and repair

2506-N Single-pack of 11.5 ml pen



- Safe on plastics
- Rapid evaporation
- Pen tip allows controlled application

TraceTech[™]

No-Clean Flux Dispensing Pen

No-clean flux applicator pen for PCB rework and repair

2507-N Single-pack of 11.5 ml pen

2507-N100 144 pack of 11.5 ml pens, 12 boxes of 12



- Excellent wetting
- Works with lead and lead-free solders
- Boost wetting for lead-free wire solder
- No cleaning necessary

TraceTech[™]

Conductive Pen

Silver ink pen for repairing electronic traces

2505-N Single-pack of 4.9 ml pen



- Repairs traces
- Makes smooth jumpers

TraceTech[™]

Overcoat Pen

Resist repair pen for PCB rework and repair

2509-GN Single-pack of 5 ml pen



- Repairs solder resist
- Green to match resist
- Prevents shorting and arcing

TraceTech[™]

Conformal Coating Remover Pen

Spot coating remover in applicator pen for PCB rework and repair

2510-N 10 ml pen



- Fast stripping action
- Non-corrosive
- Rapid evaporation

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
- Will not harden and crack



Desoldering Braid

Techspray wick is available in static dissipative bobbins for static sensitive environments.

Techspray No-Clean wick is coated with proprietary flux that only leaves a slight clear residue, which does not cause service issues. Cleaning after using Techspray No-Clean wick is strictly optional.

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.

| | Size/Color | 5' | 10' |
|------|------------|---------|----------|
| 1808 | #1 White | 1808-5F | 1808-10F |
| 1809 | #2 Yellow | 1809-5F | 1809-10F |
| 1810 | #3 Green | 1810-5F | 1810-10F |
| 1811 | #4 Blue | 1811-5F | 1811-10F |
| 1812 | #5 Brown | 1812-5F | — |
| 1813 | #6 Red | 1813-5F | — |



| #1 White | #2 Yellow | #3 Green |
|------------------|------------------|------------------|
| .035" (0.9mm) | .055" (1.4mm) | .075" (1.9mm) |
| #4 Blue | #5 Brown | #6 Red |
| .098" (2.5mm) | .130" (3.3mm) | .193" (4.9mm) |

Wick in selection chart shown actual size.

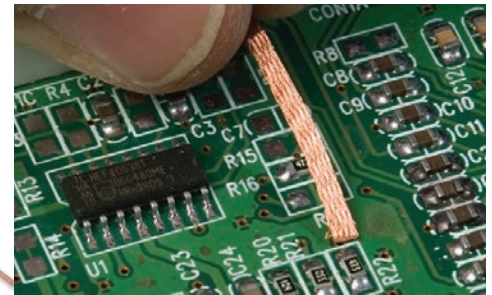
No-Clean Wick — ESD-Safe Bobbin

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/Color | 5' | 10' |
|------|------------|---------|----------|
| 1820 | #1 White | 1820-5F | 1820-10F |
| 1821 | #2 Yellow | 1821-5F | 1821-10F |
| 1822 | #3 Green | 1822-5F | 1822-10F |
| 1823 | #4 Blue | 1823-5F | 1823-10F |
| 1824 | #5 Brown | 1824-5F | — |
| 1825 | #6 Red | 1825-5F | — |



Specifications:
MIL-F-14256
NASA NHB 5300, 4 (34-1)
NASA NPC 200-4
NASA SP5002
IPC Standard-J-STD-004



Match braid width to contact area

Unfluxed Wick — ESD-Safe Bobbin















For customers who use water-soluble flux, or their own flux for aqueous processes.

| | Size/Color | 5' | 10' |
|------|------------|---------|----------|
| 1830 | #1 White | — | 1830-10F |
| 1831 | #2 Yellow | — | 1831-10F |
| 1832 | #3 Green | 1832-5F | — |
| 1833 | #4 Blue | — | 1833-10F |



Brushes




| FRONT VIEW | SIDE VIEW | Product | L Bristle Length | W Bristle Width | T Bristle Trim | Bristle Material | Handle Material | Handle Length |
|---|---|---------------|------------------------|-----------------------|--|---------------------|----------------------|--------------------|
|  |  | 2020-1 | 1.375" (35mm) | 0.25" (6.4mm) | 0.44" (11mm) | Horse Hair | Wood | 7.75" (19.7cm) |
|  |  | 2021-1 | 1.375" (35mm) | 0.25" (6.4mm) | 0.44" (11mm) | Hog Bristle | Wood | 7.75" (19.7cm) |
|  |  | 2022 | 2.125" (54mm) | 0.875" (22mm) | 0.75" (19mm) | Hog Bristle | Wood | 8.375" (21.3cm) |
|  |  | 2030-1 | 0.125" (3.2mm) | 0.0625" (1.6mm) | 0.125" (3.2mm) | Goat Hair | Stainless Steel | 3.5" (8.9cm) |
|  |  | 2031-1 | 0.25" (6.4mm) | 0.19" (4.8mm) | A - 0.25" (6.4mm) B - 0.5" (13mm) | Horse Hair | Stainless Steel | 4.5" (11.4cm) |
|  |  | 2032-1 | 0.5" (13mm) | 0.375" (9.5mm) | A - 0.19" (4.8mm) B - 0.25" (6.4mm) | Horse Hair | Zinc Plated Steel | 4.5" (11.4cm) |
|  |  | 2033-1 | 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 |
|-------------|--------------------|----------------------|------------------|--------------------|----------------|-----------------|------------------|
| 2300 | 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 |
|-------------|-------------------|----------------------|------------------|--------------------|----------------|------------------|
| 2302 | 0.44" (11.2mm) | Heat Sealed | 6" (15cm) | Polypropylene | 2302-50 | 2302-1000 |



Cotton Bud Wrapped in Foam, Rigid Head

| | | | | | | |
|-------------|----------------|-------------|--------------|---------------|---------|-----------|
| 2306 | 0.5" (13mm) | Heat Sealed | 5" (13cm) | Polypropylene | 2306-50 | 2306-1000 |
|-------------|----------------|-------------|--------------|---------------|---------|-----------|



Rigid Head

For full selection of swabs and wipes, go to www.techspray.com or full line Techspray product catalog.

FOR MORE INFORMATION



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 assembly cleaners, temporary solder masks & conformal coatings
- PCB rework & repair products
- Full line of wipes, swabs & brushes



www.platoproducts.com

PLATO®
Quality Tools for Electronic Assembly & Repair

- Soldering & desoldering tips
- Shear cutters
- Tip cleaners & other soldering accessories



Techspray - US Office
 8125 Cobb Center Drive
 Kennesaw, GA 30152
 678-819-1408
 800-858-4043
 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

Techspray - China Office
 ITW Specialty Materials (Suzhou) Co., Ltd
 Hengqiao Road, Wujiang Economic
 Development Zone,
 Suzhou, Jiangsu Province, China 215200
 (86)512-82060808 Ext 508
 MP: (86) 13777018750