



**TECHSPRAY®**

**NEW!**

# PRECISION V

## CLEANERS

### ENGINEERED FOR PERFECTION

- Non-Ozone Depleting
- Non-Flammable
- Plastic-Safe Formula
- Low-VOC Formula



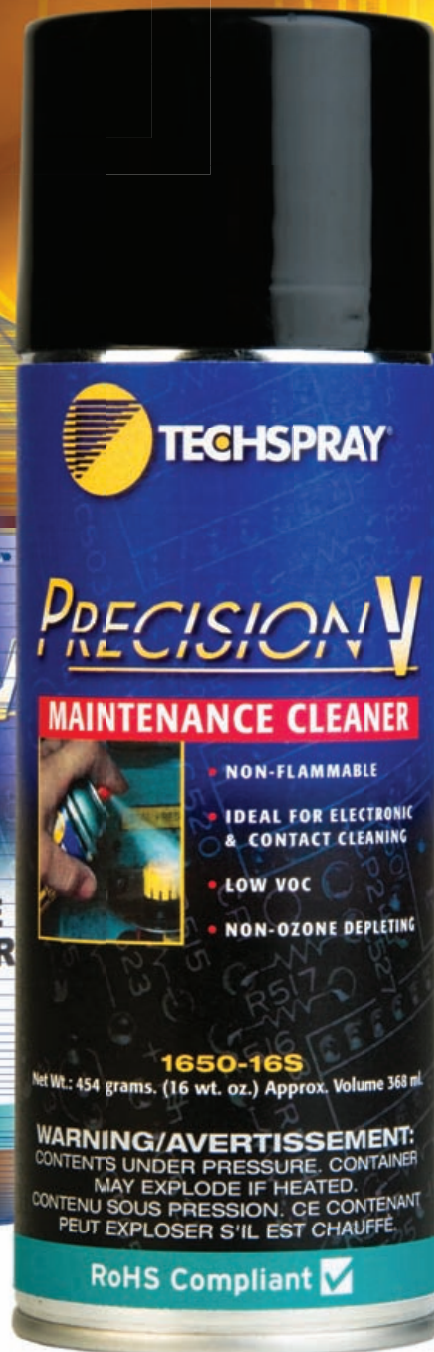
Optical Cleaning



Critical Electronics & Surfaces



Aviation/Aerospace





# INTRODUCING

# PRECISION V

## High Performance, High Precision Cleaning Solvents

- **Non-Flammable**
- **Low VOC**
- **Safe on Most Plastics**
- **Rapid Evaporation**
- **Residue-Free**
- **Non-Ozone Depleting**



*Precision-V formulas available for vapor-degreasing, cold cleaning and aerosol.*

Techspray has engineered solvent cleaners that offer exciting new options for precision cleaning. Precision-V cleaners are powerful, leave no residue, and evaporate extremely fast. Electronics, optics, and metal parts are quickly and thoroughly cleaned, eliminating the need for further rinsing.

Precision-V is non-ozone depleting, so ideal replacement for cleaners containing CFC 113, HFC-141b and AK225.

Exposure to Precision-V solvents is less hazardous than many other solvents commonly used in vapor-degreasers: e.g. TCE (Trichloroethylene, CAS #79-01-6), nPB (n-Propyl Bromide, CAS #106-94-5), and Perc (Perchloroethylene, CAS #127-18-4).

Maintenance Cleaners remove oils, greases, silicones and other common industrial contaminants. Flux Removers clean R, RA, RMA and SA type flux residues after high temperature reflow, wave and hand-soldering. Ideal for lead and lead-free processes.

### PRECISION V

#### Low VOC Formulas

Formulated to reduce VOC emissions within your facility. Ideal for aviation and other applications where strict VOC caps apply (based on EPA VOC exemptions). Bulk chemicals ideal for cold/bucket cleaning (not intended for vapor degreaser).

#### Precision-V Maintenance Cleaner

<b>1650-16S</b>	16 oz aerosol
<b>1650-P</b>	1 pint (.47L) in glass bottle
<b>1650-G</b>	1 gal (3.8L) in glass bottle
<b>1650-5G</b>	50 lbs in 5 gal (18.9L) metal drum

#### Precision-V Flux Remover

<b>1651-16S</b>	16 oz aerosol
<b>1651-P</b>	1 pint (.47L) in glass bottle
<b>1651-G</b>	1 gal (3.8L) in glass bottle
<b>1651-5G</b>	50 lbs in 5 gal (18.9L) metal drum

### PRECISION V

#### Vapor-Degreaser Formulas

Lower boiling point than most other vapor-degreaser solvents, which reduces heat-stress on components being cleaned and reduces energy consumption from the boil sump and chiller coils.

#### Precision-V Vapor-Degreaser Parts Cleaner

<b>1654-G</b>	1 gal (3.8L) in glass bottle
<b>1654-5G</b>	50 lbs in 5 gal (18.9L) metal drum
<b>1654-54G</b>	600 lbs in 54 gal (204L) metal drum

#### Precision-V Vapor-Degreaser Flux Remover

<b>1655-G</b>	1 gal (3.8L) in glass bottle
<b>1655-5G</b>	50 lbs in 5 gal (18.9L) metal drum
<b>1655-54G</b>	585 lbs in 54 gal (204L) metal drum



1651-5G

1651-16S

1650-16S



1655-5G

1654-5G



## Powerful and Non-Flammable

- Non-Flammable
- Patented Technology
- Safe on Most Plastics
- Rapid Evaporation
- Residue-Free
- Non-Ozone Depleting\*



### **G3 Blue Shower Maintenance Cleaner**

Designed for precision cleaning of polar and non-polar soils including hand and solder oils, greases, silicones, fluxes and other similar contaminants. Bulk chemicals ideal for cold/bucket cleaning and ultrasonics (not intended for vapor degreaser).

**1630-10S** 10 oz (230ml) aerosol  
**1630-16S** 16 oz (368ml) aerosol

**1635-20S** 20 oz (464ml) aerosol  
 G3 Industrial Maintenance Cleaner  
**1637-P** 1 pint (.47L)

**1637-G** 1 gal (3.8L)  
**1637-5G** 55 lbs in 5 gal (18.9L) metal drum  
**1637-54G** 605 lbs in 54 gal (204L) metal drum

### **G3 Contact Cleaner**

Removes oils, greases, silicones, dirt, and carbon build-up from contacts, pads, switches and relays. Bulk chemicals ideal for cold/bucket cleaning and ultrasonics (not intended for vapor degreaser).

**1632-10S** 10 oz (230ml) aerosol  
**1632-16S** 16 oz (368ml) aerosol

**1637-P** 1 pint (.47L)  
**1637-G** 1 gal (3.8L)

**1637-5G** 55 lbs in 5 gal (18.9L) metal drum  
**1637-54G** 605 lbs in 54 gal (204L) metal drum

### **G3 Flux Remover**

Removes R, RA, RMA and SA type flux residues after high temperature reflow, wave, and hand-soldering. Ideal for lead and lead-free processes. Bulk chemicals ideal for cold/bucket cleaning and ultrasonics (not intended for vapor degreaser).

**1631-5S** 5 oz (115ml) aerosol w/brush  
**1631-10S** 10 oz (230ml) aerosol  
**1631-16S** 16 oz (368ml) aerosol

**1638-P** 1 pint (.47L)  
**1638-G** 1 gal (3.8L)

**1638-5G** 55 lbs in 5 gal (18.9L) metal drum  
**1638-54G** 605 lbs in 54 gal (204L) metal drum

### **G3 No-Clean Flux Remover**

Designed specifically for the removal of no-clean flux and white residues. Can also be used for removing R, RA, RMA, and SA type flux residues after high temperature reflow, wave, and hand-soldering.

**1634-12S** 12 oz (276ml) aerosol

\* Aerosol formulas only.

# ECOLINE™

## Powerful and Economical

- Flammable
- Safe on Most Plastics
- Rapid Evaporation
- Residue-Free
- Non-Ozone Depleting



### **ECOLINE Blue Shower Maintenance Cleaner**

Designed for cleaning electronic and electrical equipment, machinery and metal parts. Its rapid evaporation and compatibility with plastics make it the economical choice for great cleaning.

**1620-10S** 10 oz (397ml) aerosol  
**1620-13S** 13 oz (516ml) aerosol

### **ECOLINE Contact Cleaner**

Hexane mixture that cleans electrical contacts and connections. Ideal for switches, relays, contact pads and other electrical connections. Safe on most plastics, the solvent will not damage switch and fuse housings.

**1622-10S** 10 oz (397ml) aerosol  
**1622-13S** 13 oz (516ml) aerosol  
**1622-54G** 321 lbs in 54 gal (204L) metal drum

### **ECOLINE Flux Remover**

Removes R, RA, RMA and SA type flux residues after high temperature reflow, wave, and hand-soldering. Ideal for lead and lead-free processes.

**1621-10S** 10 oz (397ml) aerosol  
**1621-5G** 33 lbs in 5 gal (18.9L) metal drum  
**1621-54G** 321 lbs in 54 gal (204L) metal drum

**Maintenance Cleaners** — Cleans oils and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, relays, contacts and housings.

	Non-Flammable	Non-Ozone Depleting	VOC	Plastic-Safe	Flash Point	Toxicity	Aerosol	Cold/ Bucket Cleaning	Ultrasonic	Vapor Degreaser
1620	○	●	75%	●	22°F/5.6°C	500ppm	●	○	○	○
1622	○	●	75%	●	22°F/5.6°C	500ppm	●	●	○	○
1630	●	●	61%	○	none	448ppm	●	○	○	○
1632	●	●	60%	○	none	395ppm	●	○	○	○
1637	●	○	61%	○	none	169ppm	○	●	●	○
1650	●	●	37%	○	none	420ppm	●	●	●	○
1654	●	●	41%	○	none	259ppm	○	●	○	●
1658	●	○	59%	○	none	243ppm	○	●	●	●
1663	●	○	0%	●	none	270ppm	●	●	●	●
1664	●	○	35%	○	none	323ppm	●	●	●	●
1667	●	○	9%	○	none	350ppm	●	●	●	○
1668	●	○	<1%	○	none	278ppm	●	●	●	○

**Flux Removers** — Removes no-clean and rosin based residues off of printed circuit boards in production, rework and repair.

	Non-Flammable	Non-Ozone Depleting	VOC	Plastic-Safe	Flash Point	Toxicity	Aerosol	Cold/ Bucket Cleaning	Ultrasonic	Vapor Degreaser
1621	○	●	75%	●	22°F/5.6°C	500ppm	●	●	○	○
1631	●	●	61%	○	none	395ppm	●	○	○	○
1634	●	●	61%	○	none	395ppm	●	○	○	○
1638	●	○	70%	○	none	155ppm	○	●	●	○
1651	●	●	37%	○	none	420ppm	●	●	●	○
1655	●	●	43%	○	none	278ppm	○	●	○	●
1660	●	○	35%	●	none	323ppm	●	○	○	○
1665	●	○	5%	●	none	277ppm	●	●	●	●
1666	●	○	5%	○	none	276ppm	○	●	●	●
1669	●	○	15%	●	none	281ppm	○	●	●	●

● IDEAL   ○ ACCEPTABLE   ○ NOT SUITABLE or NOT APPLICABLE

VOC calculated percentage by weight following EPA exemptions of aerosol formulas (where applicable). Toxicity calculated weighted average of ACGIH or supplier rating of aerosol formulas (where applicable).