



TECHSPRAY®

Technical Data Sheet

Precision-V Vapor-Degreaser Flux Remover

1655

Flux removers (defluxers) remove flux residues and other contaminants left by manufacture, rework, or repair of printed circuit boards. Residues from higher, leadfree temperatures are more baked on and harder to clean. G3, Ecoline and PrecisionV flux removers have been proven very effective at removing fluxes baked on at leadfree temperatures.

Microcomponents and fine pitch leads are delicate and easily damaged, so brushing and scrubbing should be avoided if possible. Both G3, Ecoline and PrecisionV have a powerful spray and strong solvent that blasts off residues and cleans areas under components that a brush cannot touch.



Powerful vapor degreaser solvent

Ideal replacement for AK225-based cleaners, which will be phased out by 2015 due to ozone depletion restrictions. (See side bar at left) Azeotropic properties that allow it to maintain stable as it is cycled in a vapor-degreaser. It is not reactive nor corrosive to metals commonly found in the construction of vapor-degreasers. Exposure to Precision-V solvents is less hazardous than many other solvents commonly used in vapor-degreasers: e.g. TCE, nPB, and Perc. Precision-V solvents have a lower boiling point than most other vapor-degreaser solvents. This reduces heat-stress on components being cleaned and reduces energy consumption from the boil sump and chiller coils. Precision-V Flux Remover cleans R, RA, RMA and SA type flux residues after high temperature reflow, wave and hand-soldering. Ideal for lead and lead-free processes.

- **Powerful cleaner**
- **Non-flammable**
- **Non-ozone depleting**
- **Safe on electronics**
- **Rapid evaporation**
- **Zero residue**
- **Safe on most plastics**
- **EPA SNAP approved**
- **Low VOC**
- **Vapor-degreaser formula**

Product Packaging

1655-G
Precision-V Vapor-Degreaser Flux Remover
1 gal
1 units/case



1655-5G
Precision-V Vapor-Degreaser Flux Remover
50 lbs
1 units/case



1655-54G
Precision-V Vapor-Degreaser Flux Remover
585 lbs
1 units/case



Instructions

Reclamation Process:

The reclamation (i.e.. boil down) process utilizes the vapor-degreaser as a still to distill solvent from the dirty boil sump and allows you to reclaim and reuse this solvent. When it is determined that the Boil Sump needs to be cleaned out, you should do the following things to boil down the solvent:

1. If you have a 2 sump vapor-degreaser, drain the rinse sump into a clean container for reuse. If you have a one-sump vapor-degreaser, drain the spray reservoir using the spray wand. This material should be collected in a clean container, so it can be reused.





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2. Allow the solvent to continue to boil, and the vapors to condense, until such time as one of two things happens:
 - a. the High Temperature Control (HTC) trips and turns off the heat to the heating elements or
 - b. the Liquid Level Control trips because the level in the Boil Sump is too low.
3. Drain the remaining solvent/soil mixture into a container that is labeled as Hazardous Waste. This material can be used in future "boil downs" to reclaim more of the solvent in the mixture.
4. Use the retained solvent (from step 1) to refill the vapor-degreaser and add whatever volume of solvent is necessary to completely fill the machine.

This process can be repeated as often as necessary, depending on the amount of usage of the vapor-degreaser and the amount of soil that is introduced into the vapor-degreaser. When you "boil down", always put the solvent/soil mixture into the vapor-degreaser to reclaim additional amount of the solvent from this mixture.

Chemical & Physical Properties

Appearance	Clear, colorless liquid
Odor	Faint ethereal odor
Flash Point	none
VOC (EPA)	41%
VOC (CARB)	
Boiling Point	32.2°C (90°F)
Density	1.3077 at 25°C

Chemical Composition

CHEMICAL NAME	CAS #
1,1,1,2,2,3,4,5,5,5-decafluoropentane (HFC-4310mee)	138495-42-8
1,2-transdichloroethylene	156-60-5
1,1,1,3,3-pentafluorobutane (HFC-365mfc)	406-58-6
Ethanol	64-17-5
Methanol	67-56-1
Nitromethane	75-52-5

Metals Compatibility

MATERIAL NAME	RATING
Brass foil	Excellent short-term, slight reaction long-term
Copper foil	Excellent short-term, slight reaction long-term
Nickel 200	Excellent short-term, slight reaction long-term
Aluminum 6061	Excellent
Aluminum 2024	Excellent short-term, slight reaction long-term
Stainless Steel 316	Excellent
Stainless Steel 304	Excellent
Mild carbon steel	Slight reaction short- and long-term
Galvanized Steel	Excellent

Environmental Policy

Techspray is committed to developing products to ensure a safer and cleaner environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.





Resources

Techspray products are supported by a global sales, technical and customer services resources.

For additional technical information on this product or other Techspray products in the United States, call the technical sales department at 800-858-4043, email tsales@techspray.com or visit our web site at: www.techspray.com.

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