



## PWR-4 Solvent 3910

### Product# 3910

#### Product Description

PWR-4 Solvent 3910 is ideal where a safer, nonflammable and cost effective cleaner is required. It has a much lower Global Warming Potential (GWP) than other fluorocarbon containing solvents that contain HFC and most HFES.

This innovative solvent is much safer than the four most common industrial solvents: TCE, nPB, perchloroethylene (PERC) and methylene chloride and quickly cleans the difficult baked-on R, RMA & no-clean fluxes from electronic assemblies. It is also a very effective cleaner for precision cleaning removing light, medium or heavy greases.

PWR-4 Solvent 3910 has azeotrope properties that allow it to maintain stable properties as it is cycled in a vapor-degreaser. It is neither reactive nor corrosive to metals commonly found in the construction of vapor-degreasers. It is stabilized to minimize any chances of acidification.

All ingredients in Precision-V Solvent 3910 are synthesized in the United States and the final product is compounded in the United States to provide the most secure supply chain.

*NOTE: As with all vapor degreaser equipment and processes, observe all safety precautions, guidelines and operating rules associated with these units. Failure to do so may put operations personnel at risk. For example avoid excessive vapor losses, loss of refrigeration or excessive boil sump heat. PWR-4 Solvent 3910 has no closed cup flash point however keep any ignition source away from the vapors. Ensure all equipment is operated per the manufacturer's guidelines and instructions. If in doubt, contact your manufacturer immediately.*

#### Features / Benefits

- High performance low GWP replacement for Novec 71DE, 72DE & 73DE solvents
- Nonflammable
- Much safer than most common industrial solvents — TCE, nPB, Perc & Methylene Chloride
- Available in bulk for vapor-degreasing, ultra-sonic and immersion cleaning
- Rapid evaporation
- Stabilized for metals such as aluminum, magnesium, titanium, and brass
- Noncorrosive, safe for sensitive metals
- 100% of the supply chain is US based
- Very Low GWP of 2.7



#### Typical Product Data and Physical Properties

Physical State	Clear liquid
Odor	Faint ethereal odor
Color:	Colorless
Percent Volatile:	100
Flash Point (Method)	none (TAG CC)
KB Value	100
Specific gravity	1.29
Density	1.29 g/cm <sup>3</sup>
Vapor pressure (kPA)	4.39
Vapor pressure (mmHg)	329.5
RoHS Compliant	yes
Global Warming Potential (GWP)	2.7
VOC Content	Carb 100%
	SCAQMD 1239 g/L
	EPA 100%, 129 g/L

#### Vapor Degreaser Setting Guidelines

Boiling point	118°F (48°C)
Boil sump temp set	127°F (53°C)
High solvent temp set	136°F (58°C)
Refrigerant high temp set	109°F (43°C)

#### Packaging and Availability

PWR-4 Solvent 3910 available in the following sizes

<b>3910-G</b>	1 gallon
<b>3910-5G</b>	5 gallons
<b>3910-54G</b>	54 gallons

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### Compatibility

Material Name	Compatibility
ABS	Non-Compatible
Buna-N	Fair
EPDM	Fair
Graphite	Excellent
HDPE	Excellent
LDPE	Good
Lexan	Poor
Neoprene	Fair
Noryl	Poor
Nylon 66	Excellent
Cross-Linked PE	Excellent
Polyacrylate (PMMA)	Non-Compatible
Polypropylene	Excellent
Polystyrene	Non-Compatible
PPSU	Excellent
PVC	Excellent
Silicone Rubber	Poor
Teflon	Excellent
Viton	Fair

PWR-4 cleaners are generally compatible within normal operating conditions of vapor degreaser and with exposed materials normally found with the equipment. Specific plastic and elastomeric formulations vary with manufacturers; therefore, we recommend compatibility verification when required.

### Reclamation Process

The reclamation (ie. 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.
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.

### 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 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](mailto:tsales@techspray.com) or visit our web site at: [www.techspray.com](http://www.techspray.com).

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