

Technical Data Sheet

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PWR-4 Solvent 3910

Product# 3910

Techspray® Precision-V 3910 is a PFAS Free and 100% US Manufactured

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. It is 100% US Made and PFAS Free (per EPA TSCA 8(a)(7))

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 & noclean 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.

Feature/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
- PFAS Free

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
- 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.

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

 3910-G
 1 gallon

 3910-5G
 5 gallons

 3910-54G
 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.

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. Ensure all equipment is operated per the manufacturer's guidelines and instructions. If in doubt, contact your manufacturer immediately.

Product displays no closed-cup flash point. However, the product contains halogenated compounds, which may present a masking effect on flashpoint testing results. Product contains flammable and nonflammable components, there are cases where flammable vapors may evolve under certain conditions and yet will not exhibit a closed-cup flash point. This phenomenon is noted when a nonflammable component is sufficiently volatile and present in sufficient quantity to inert the vapor space of the closed cup, thus preventing a flash. However, flammable/explosive vapor air mixture may form. Avoid vapor contact with ignition source or extreme heat.

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 ³
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

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 or visit our web site at: www.techspray.com.

Important Notice to Purchaser/User: The information in this publication is based on tests that we believe are reliable. The results may vary due to differences in tests type and conditions. We recommend that each user evaluate the product to determine its suitability for the intended application. Conditions of use are outside our control and vary widely. Techspray's only obligation and your only solution is replacement of product that is shown to be defective when you receive it. In no case will Techspray® be liable for any special, incidental, or consequential damages based on breach of warranty, negligence or any other theory.



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