



## FLUX REMOVER

### 3401

#### Introduction

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PWR-4<sup>™</sup> Flux Remover is ideal where a safer, non-flammable, and cost effective cleaner is required. This innovative solvent is much safer than the four most common industrial solvents: TCE, nPB, Perc and Methylene Chloride and quickly cleans the most difficult baked-on R, RMA & no-clean fluxes from electronic assemblies. It is engineered to remain stable and effective over thousands of cycles in vapor degreasing equipment.

#### Features / Benefits

- Non-flammable
- Much safer than most common industrial solvents —TCE, nPB, Perc & Methylene Chloride
- Powerful cleaner - Effective on R, RMA & no-clean fluxes
- Available in aerosol or bulk for vapor-degreasing, ultra-sonic and immersion cleaning
- Rapid evaporation

#### Chemical Properties *(SDS available on request)*

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- PHYSICAL STATE: ..... Liquid
- ODOR: ..... Faint ethereal odor
- COLOR: ..... Clear
- PERCENT VOLATILE: ..... 100
- FLASHPOINT (METHOD): ..... none (TAG CC)
- KB VALUE: ..... 100
- Specific gravity ..... 1.27
- Vapor pressure (mmHg) ..... 267
- VOC – CARB: ..... 100%
- VOC – SCAQMD ..... 1201 g/l
- VOC – EPA ..... 95%

## Performance Testing

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Per MIL-PRF-29608 4.5.9, % Efficiency / soil removal

**Soil Removal – Ultrasonic Cleaning**

- Kester 959 Low Res No-Clean Flux ..... 100%
- W/W Gum Rosin..... 100%

**Soil Removal - Vapor Degreasing**

- Kester 959 Low Res No-Clean Flux ..... 100%
- W/W Gum Rosin..... 100%

**Soil Removal – Hand Wiping**

- Kester 959 Low Res No-Clean Flux ..... 100%
- W/W Gum Rosin..... 100%

## Plastics Compatibility

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Material	Compatibility
ABS	Not Compatible
Buna-N	Fair
EPDM	Fair
Graphite	Excellent
HDPE	Excellent
LDPE	Good
Lexan	Fair
Neoprene	Fair
Noryl	Not Compatible

Material	Compatibility
Nylon 66	Excellent
Cross-Linked PE	Excellent
Polypropylene	Excellent
Polystyrene	Not Compatible
PVC	Excellent
Silicone Rubber	Poor
Teflon	Excellent
Viton	Fair

PHYSICAL PROPERTIES	3400 PWR-4 Maint Clnr	n-Propyl Bromide (nPB)	Trichloroethylene (TCE)	Perchloroethylene (Perc)	Methylene Chloride
Flash Point	None	None	None	None	None
KB Value	100	125	129	90	136
Dielectric Strength (kV)	23	24	30	45.7	24
Surface Tension (dynes/cm)	22	24	29	32	27
Evaporation Rate (n-butyl acetate =1)	0.3	0.28	4.45	1.5	7
Boiling Point	118°F (48°C)	158°F (70°C)	189°F (87°C)	250°F (121°C)	104°F (40°C)
Specific Gravity	1.26 @ 20°C	1.35 @ 25°C	1.46 @ 20C	1.62 @ 20C	1.31 @ 25C
Vapor Pressure (mm Hg) @ 20C	268	111	58	14	355
Heat of Vaporization (cal/g)	68	59	57.2	50.1	78.7

#### ENVIR. & HEALTH REGULATORY

Ozone Depleting Potential (ODP)	0	0.016-0.019	0	0	0
Global Warming Potential (GWP)	Low	0.31	140	Negligible	8.7
Volatile Organic Compounds (VOC)	Yes	Yes	Yes	Exempt	Exempt
SNAP Approved	Yes	Yes	Yes	Yes	Yes
Hazardous Air Pollutant (HAP)	No	Proposed	Yes	Yes	Yes
Prop 65 Chemical	No	Yes	Yes	Yes	Yes
Carcinogen (or suspected)	No	Yes	Yes	Suspected	Suspected
Threshold Limit Value (ppm) (TLV)	200	10	25	25	25

#### MATERIAL COMPATIBILITY

ABS	×	○	×		
Buna-N	○	⊙	×		
EPDM	○	×	×		
Graphite	●	●	●		
HDPE	●	●	○		
LDPE	●	○	×		
Lexan	×	×	×		
Neoprene	○	○	×		
Noryl	×	⊙	×		
Nylon 66	⊙	●	○		
Cross-Linked PE	⊙	●			
Polypropylene	●	⊙	○		
Polystyrene	×	×	×		
PVC	⊙	⊙	×		
Silicone Rubber	○	×	×		
Teflon	●	●	●		
Viton	⊙	●	●		

#### CLEANING EFFICIENCY

Grease type	3400 PWR-4 Maint Clnr
Corrosion Inhibitor	●
All Purpose Grease	●
Motor Oil	●
Hydraulic Fluid	●
Silicone Fluid	●
Chain Lube	●
No Clean Flux	●
Rosin Flux	●

KEY:

● = Excellent ⊙ = Good ○ = Fair × = Poor

## Environmental Policy

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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.

## Packaging and Availability

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PWR-4 Flux Remover available in the following sizes:

3401-G	1 gallon / 3.8L
3401-5G	5 gallons / 19L
3401-54G	54 gallons / 205L

## Resources

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

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