



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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INDUSTRIAL MAINTENANCE CLEANER

3400

Introduction

PWR-4™ Industrial Maintenance Cleaner 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 greases and oils from electronics, relays, and motors. 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 — Ideal for degreasing and contact cleaning
- Available in aerosol or bulk for vapor-degreasing, ultra-sonic and immersion cleaning
- Rapid evaporation

Applications

- Electronics
- Relays, switches & breakers
- Transformers
- Electric motors and generators

Chemical Properties *(SDS available on request)*

- PHYSICAL STATE: Liquid
- ODOR: Faint ethereal odor
- COLOR: Clear
- PERCENT VOLATILE: 100
- FLASHPOINT (METHOD): none (TAG CC)
- KB VALUE: 100

	<u>Liquid</u>	<u>Aerosol</u>
• Specific gravity	1.27	1.22
• Vapor pressure (mmHg)	267	175
• Dielectric breakdown (ASTM D-877)	23.7 kV	8.0 kV
• VOC – CARB:	100%	73%
• VOC – SCAQMD	1201 g/l	854 g/l
• VOC – EPA	95%	70%

Performance Testing

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

Soil Removal – Vapor Degreasing

- Lubrizol Corrosion Inhibitor..... 100%
- Unilube All Purpose Grease 81%
- 5W30 Synthetic Oil..... 100%
- Fire Resistant Hydraulic Fluid..... 100%
- Chain Lubricant 100%
- Silicone Fluid..... 100%

Soil Removal – Ultrasonic Cleaning

- Lubrizol Corrosion Inhibitor..... 100%
- Unilube All Purpose Grease 100%
- 5W30 Synthetic Oil..... 100%
- Fire Resistant Hydraulic Fluid..... 100%
- Chain Lubricant 100%
- Silicone Fluid..... 100%

Plastics Compatibility

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

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

PWR-4 Industrial Maintenance Cleaner available in the following sizes:

3400-20S	20 oz. Aerosol Can 12 cans/case
3400-G	1 gallon / 3.8L
3400-5G	5 gallons / 19L
3400-54G	54 gallons / 205L

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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Countries Outside US

Call to locate a distributor
in your country.

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