



## Product Bulletin

Better Chemistry. Better Business.

Hubtron PB Plus

Product Code: 4361024  
Revised Date: 08/22/2007

### Hubtron PB Plus

#### DESCRIPTION

Hubtron PB Plus is a powerful solvent, azeotrope-like blend, for cleaning and degreasing, meets or exceeds the requirements of ASTM-D-6368. It is milder than Hubtron PB and yet has the same characteristics and similar physical properties as other halogenated solvents such as 1,1,1-trichloroethane and trichloroethylene.

Hubtron PB Plus has no flash point and has a low ozone depleting potential. It is essentially 1,1,1-trichloroethane without the adverse effect on the environment. Hubtron IP can be used for vapor degreasing and rapid drying.

#### PHYSICAL PROPERTIES

An evaluation and comparison between Hubtron PB Plus and other common solvents:

	HUBTRON PB PLUS	1,1,1-TCA	TCE	MeCl <sub>2</sub>	HCFC-141b
Boiling Point °C	68	74	87	40	32
Specific Gravity, 25°C	1.26	1.32	1.46	1.33	1.24
Viscosity, 25°C, cps	0.49	0.79	0.54	0.43	0.43
S. Tension dy/cm, 20°C	24.2	25.6	26.4	28.2	19.3
Vapor Pressure, 20°C	109.0	100	57.8	349	518
Specific Heat, 25°C	0.27	0.25	0.22	0.28	
Latent Heat, cal/gm	58.8	57.5	57.2	78.7	52.3
Solubility in Water, w%	0.27	0.07	0.11	0.14	0.18
Flash Point, TCC	None	None	None	None	None
Flammability limits, v%	4-7.8	7.4-16.5	8.3-12.5	14.6-21.8	7.6-17.7
Kauri Butanol Value	125	124	129	136	56
Life Span in Air	2 weeks	5 years	1 year	1year	10 years
ODP	0.02	0.1	0		0.1
ACGIH TLV, ppm	100	350	50	25	500



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### **APPLICATIONS**

Hubtron PB Plus can be useful in various applications such as: Cleaner-Degreaser, Printed Circuit Boards cleaning, Precision cleaning, Metal cleaning, Carbon removal, Automotive parts cleaning, Drying agent.

Hubtron PB Plus can be utilized in existing vapor degreasing drying equipment after some adjustments. It can be used to replace 1,1,1-TCA, TCE, HCFC-141b and other cleaning solvents.

### **COMPATIBILITY**

Various metals have been tested for compatibility with Hubtron PB Plus in accordance with Mil-T-81533A. The metal corrosion test – 24 hours exposure to boiling solvent, has yielded no sign of corrosion on the following metals:

Aluminum, Brass, Carbon steel, Copper, Inconel, Magnesium, Monel, Stainless Steel, Titanium and Zinc.

### **SAFETY**

Hubtron PB Plus is not a reportable chemical under SARA 313.  
Hubtron PB Plus is not regulated as a hazardous waste under RCRA.  
Hubtron PB Plus is not regulated as hazardous air pollutant under NESHAP.  
Hubtron PB Plus is still considered as VOC and must be used according the regulations.  
Refer to Hubtron PB Plus Material Safety Data Sheet.

### **PACKAGING**

Hubtron PB Plus is available in 550 Lb. Drums and 50 Lb. Pails. Smaller size packaging available upon request.

The product should be stored in the original containers in a cool, dry and ventilated place. Do not expose to temperatures higher than 120°F.

### **WARRANTY**

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.