

# DEVISOR & SOURCE CONTROL SYSTEM

"The Industry Standard"



HEPA filtration protection of HCW from aerosols and infectious diseases as required by CDC and OSHA

TB ■ RIBAVIRIN ■ PENTAMIDINE

"Local exhaust ventilation is a preferred source control technique, and it is often the most efficient way to contain airborne contaminants because it captures these contaminants near their source before they can disperse. Therefore, the technique should be used, if feasible, wherever aerosol generating procedures are performed." — October 1994 CDC Guidelines<sup>1</sup>

#### **OVERVIEW**

The CDC and OSHA have classified sputum induction and all cough inducing procedures as "high risk" for the transmission of tuberculosis. OSHA regulations clearly indicate that precautions must be taken during such procedures to protect the care giver and other patients as well as the general air quality of the facility. The DEMISTIFIER local exhaust system utilizes "source control" to help prevent emitted contaminants from ever infiltrating the general air supply or personal breathing zones of the care giver.

Ribavirin to treat Respiratory Syncytial Virus (RSV) in infants and adults, Pentamidine used prophlylactically to prevent Pneumocystis Carinii Pneumonia in AIDS patients and aminoglycocide antibiotics as well as other drugs are administered by aerosolization. Bronchospasm and coughing during treatment can spread bacteria. The DEMISTIFIER scavenges drug particles

and bacteria to prevent their spread in the treatment room or beyond.

The AARC's Aerosol Consensus statement released in September, 1991 concludes that Pentamidine and Ribavirin are released into the environment during treatments. These drugs "can be absorbed systemically after aerosol inhalation, they can be retained in the body, and can potentially produce cumulative organ damage." In addition to the hazard of direct exposure to aerosolized drugs, patients infected with HIV have an increased prevalence of TB.

The Demistifier can be used to isolate patients and help prevent the spread of RSV throughout the PICU. The use of aerosolized Ribavirin to treat adult transplant patients has been on the increase in recent years. The DEMISTIFIER system works equally well for adults or children.

2. American Association for Respiratory Care. Aerosol Consensus Statement. 1991. Respiratory Care, Sept. 1991. Vol. 36, No. 9.

#### DEMISTIFIER 2000 Standard Demistifier "Source Control" for Sputum Induction and Aerosolized Drug Treatments

99.99% HEPA filtration

Easily portable and adaptable to a variety of procedures

Sturdy steel construction with easy change filter system

Requires no installation and is easy to operate, clean and maintain

Used by over 1000 hospitals across the country



The DEMISTIFIER has become the *industry standard* for healthcare worker protection, helping to meet CDC

and OSHA requirements for high risk procedures. The DEMISTIFIER isolates the patient in a vinyl enclosure similar to an oxygen tent. Air is drawn upward from the area around the bottom of the skirt and flows through a HEPA system at a rate of 240 to

360 air changes per hour.

The flexibility of the various canopies allows for optimum patient comfort – procedures can be performed in a wheelchair, treatment chair, bed, exam table and even a crib.



Demistifier 2005 bed canopy for in bed procedures.

Patients can be easily observed through the clear vinyl enclosure, and the system motor is quiet enough to allow normal conversation between caregiver and patient within. The DEMISTIFIER takes up little space and is easily transportable allowing movement to specific treatment areas. Vinyl canopies are inexpensive and disposable.

# DEMISTIFIER 2100 Negative Pressure Bed Enclosure for Infectious Patients

OSHA regulations require that patients even suspected of having TB be isolated under negative pressure. This presents a problem for many facilities that can not provide the necessary amount of negative pressure rooms as the need arises. The DEMISTIFIER Negative Pressure Bed Enclosure is the instant solution to isolating these patients where ever they may be.



DEMISTIFIER Negative Pressure Bed Enclosure (Catalog No. 2100).

The Negative Pressure Bed Enclosure incorporates the standard DEMISTIFIER 2000 unit with a bed frame and 4 sided vinyl enclosure.

The telescoping steel frame can accommodate anything from a gurney in the emergency room to a full size hospital bed. The frame breaks down to four pieces and is on wheels for easy transport and storage. The frame weighs only 50 pounds allowing manageable movement throughout the hospital.

The enclosure can be assembled around any hospital bed in 5 minutes. When the frame is in place, the durable vinyl enclosure is secured with the use of elastic bands that attach to eye hooks on the frame. Zippers along enclosure corners and service flaps on enclosure sides allow for patient access while maintaining negative air flow.

## EFFICACY OF THE DEMISTIFIER FILTER PACK AGAINST COMMON RESPIRATORY PATHOGENS

Organism	Total cfu Challenge to Filter	Recovery of Typical Colonies per Agar Strip
ТВ	10⁵	None
Streptococcus	9x108 (Ca. 109)	None
A. niger (mold spores)	8x10 <sup>7</sup> (Ca. 108)	None
C. albicans (yeast)	8x10 <sup>7</sup> (Ca. 108)	None

Independent studies have shown the efficacy of Peace Medical's filter pack in removing airborne drug particles and respiratory pathogens.

The DEMISTIFIER 2100 is also an ideal interim device when major construction projects disrupt hospital routine. It is being used in emergency departments, recovery rooms, ICUs and ordinary patient rooms.

### The DEMISTIFIER System Adapts for Ribavirin Treatments and Respiratory Isolation

The DEMISTIFIER can also be used for crib applications. It is available with a taller mast and shorter boom support to accommodate cribs with croup frames, to treat R.S.V. with ribavirin. This configuration also provides respiratory isolation for infectious infants.

The wheels on the DEMISTIFIER allows it to be moved from treatment room to nursery by one person for greater convenience. No tools are necessary to change the mast and boom.

A special crib canopy that has openings on three sides is used to provide airflow and access to the patient during longer term treatments.

The DEMISTIFIER ribavirin scavenging system has been tested by NIOSH under clinical conditions with extremely positive results. NIOSH report HETA 91-104 is available upon request.



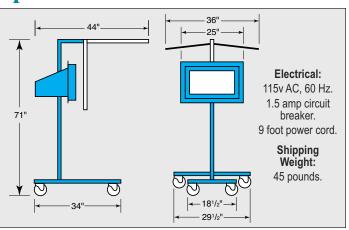
DEMISTIFIER shown with Crib Assembly No. 2007 and Crib Canopy No. 2006.



The DEMISTIFIER can be wheeled up to a crib and used when treating RSV affected infants with ribavirin. The canopy is placed over the hood, and escaping ribavirin is scavenged.

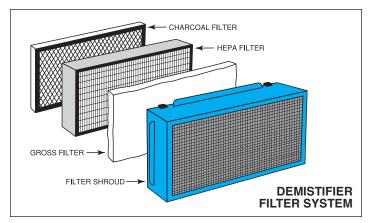
1. MMWR October 28, 1994 / Vol. 43 / No. RR-13

#### **Specifications**



#### **Easy Change Filter System**

The filter pack consists of two filters. The HEPA (High Efficiency Particulate Air) filter is manufactured from a micro fiber silicate, and individually tested to meet The Institute of Environmental Safety Standard RP-CC-001-86. This filter is 99.99% effective in removing airborne particles 0.3 microns in diameter.



Crib mast and boom assembly.

2007

The carbon/prefilter is positioned in front of the HEPA filter and is designed to capture larger airborne particles, thereby extending the life of the HEPA filter. The newly designed filter shroud, with its slide-in/slide-out friction seal, makes prefilter changes quick and easy while the HEPA filter remains untouched.

#### **DEMISTIFIER Control Panel**

The control panel consists of a 1.5 amp On/Off switch with circuit breaker designed to switch off if there is an internal failure. The control panel also includes LEDs to indicate required filter changes.



#### Ordering Information Terms: Net 30. FOB Orange, New Jersey

Item No.	Description	Item No.	Description	
2000	DEMISTIFIER complete with HEPA, carbon/prefilter, motor, mobile stand and 6 standard size canopies.	2100	Negative Pressure Bed Enclosure. Includes DEMISTIFIER Unit, isolation bed frame & four 4 mil vinyl enclosures. Enclosures have zippers at all four corners and two service flaps on each long side.	
2001	2 mil chair canopy. For use with wheelchair or treatment chair in upright or semi-reclined position.			
2002	Replacement HEPA filter for Cat. No. 2000.	2101 Isolation bed frame only for use with Cat. No. 2100.		
2002	Replacement REPA litter for Gat. No. 2000.		Replacement 4 mil vinyl bed enclosure for use with Cat. No. 2100.	
2003	Replacement Demsitifier prefilter	2102		
2004	Replacement Demsitifier carbon filter		1/1:	
2005	2 mil bed canopy. Covers upper body, tucks in under mattress with air flow opening directly opposite filter pack.		50 South Center Street, Unit 11 Orange, New Jersey 07050 Tel: 973-672-2120 Fax: 973-672-3404	
2006	2 mil crib canopy for use with Cat. No. 2007.	Email: info@peacemedical.com		



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