

PRODUCT DATA

PENEWET®

DESCRIPTION

Product No.: 6450 clear

Penewet is an ready-to-use, colorless wetting agent/surfactant solution incorporating advanced concepts in surface chemistry. It provides powerful wetting, penetrating and coalescing of asbestos containing materials (ACM) to permit handling and removal of these materials under damp, dust-free conditions. Penewet is a nonflammable water based nontoxic liquid which will not corrode aluminum components of spray equipment.

PROPERTIES

- Solids by Weight: 10 +/-2%
- Volatile: Water
- Average particle size: 0.2 microns
- Viscosity @ 77°F: 50-55 Krebs Units
- Weight per gallon @ 77°F: 8.8 lbs.
- Ionic nature: Non-ionic
- Flammability: Non-flammable
- Phosphate free?: Yes
- Surface tension: 31 dynes/cm.
- Coverage: 500 sq.ft./gal.
- Shelf Life: @ 77°F, 36 months minimum, (in original factory sealed containers).
- Odor: Applied indoors, virtually odorless.
- Packaged: 5, and 55 gallon containers

APPLICATION INFORMATION

SURFACTANT/WETTING AGENT: Penewet is a ready-to-use formulation. Sealing microscopic residual fibers after asbestos removal is mandatory on every project. Prior to post-removal air monitoring, apply one coat to all exposed surfaces prior to post removal air monitoring.

PULLDOWN BY MISTING: Pulldown by misting the contaminated air is an effective technique prior to post removal air-monitoring. To pull down free-floating asbestos fibers effectively, stand in the center of the room and hold the spray gun as close to the ceiling as possible. A mist should be sprayed parallel to the ceiling in every direction or in a circle. Apply one coat to the polyethylene walls and floor.

(Over)



FIBERLOCK TECHNOLOGIES, INC.

150 Dascomb Road
Andover, MA 01810 U.S.A.
Toll Free: (800) 342-3755
Tel.: (978) 623-9987 Fax: (978) 475-6205
www.fiberlock.com

APPLICATION PROCEDURES FOR PENEWET ASBESTOS WETTING COMPOUND

PREPARATION

Prior to application, stir thoroughly to achieve a uniform consistency. Penewet is pre-mixed, water addition is not necessary.

APPLICATION EQUIPMENT

Professional models of all brands of spray equipment can be used to successfully apply Penewet. Use the settings below when applying Penewet:

Pressure: 2500-2700 psi
Hose length: 100 feet
Hose diameter: 1/4 inch
Tip size: .015 - .027 (orifice size)
Fan size: 12 inches

CLEAN UP

Tools and drippings should be cleaned with soap and water before coating dries.

SHIPPING AND STORAGE INFORMATION

Shelf Life: 3 years in sealed containers

Storage Temperature: Keep from freezing. Store in a dry place at temperatures between 40°F - 100°F

Flash Point: None.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL USE ONLY
KEEP FROM FREEZING**

Cautions: Approved respirators must be used to prevent inhalation of asbestos fibers that may be present in the air. Protective clothing should be worn. Tools and drippings should be cleaned immediately with clean, soapy water before the coating dries. Careful consideration should be given to all Environmental Protection Agency (EPA), OSHA and state regulations in effect at the time of application of Penewet. The EPA, through the Office of Pesticides and Toxic Substances has issued reports headed "Guidance for Controlling Friable Asbestos-Containing Materials in Buildings," EPA 560/S 85-024, June 1985, and "Managing Asbestos in Place, A Building Owner's Guide to Operations and Maintenance Programs for Asbestos Containing Materials," 201-2003, July 1990, containing the proper data, cautions, and procedures for asbestos control. Copies are available from the Environmental Assistance Division, TS-799, TSCA Assistance Information Service, U.S. EPA, 401 M Street SW, Washington, DC 20460, (202) 554-1404.

Keep from freezing. Do not store at temperatures above 100°F.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of this product are beyond our control. Neither Fiberlock Technologies, Inc., nor our agents shall be responsible for the use or results of use of this product or any procedures or apparatus mentioned. We recommend that the prospective user determine the suitability of Penewet for each specific project and for the health and safety of personnel working in the area.

MATERIAL SAFETY DATA SHEET

(Essentially similar to OSHA form 174, Sept. 1985 - For Compliance with OSHA's Hazard Communication Standard, 29CFR 1910.1200)

Section I - Product Identity:

Penewet® (6450)

Manufacturer's Name:
Fiberlock Technologies, Inc.
150 Dascomb Road
Andover, MA 01810

Date of Preparation: September 15, 2002
Information Telephone Number: (978) 623-9987
Emergency Telephone Numbers:
Weekdays: (978) 623-9987
After hours, weekends & holidays: (978) 887-5926, or
"CHEM-TEL" Emergency Contact Number: (800) 255-3924

Section II - Hazardous Ingredients/Identify Information

HAZARDOUS COMPONENT	COMMON NAME(S)	%	CAS. NO.	OSHA PEL	OR	ACGIH TLV
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None per the limits for reporting set forth in 29CFR 1910.1200

Section III - Physical/Chemical Characteristics

Boiling Points of Major Constituent (Water)	212°F	Specific Gravity (H ₂ O=1) Wgt./gal.	1.01
Vapor Pressure (mm Hg) @ 68°F	ND	Melting Point Water (Ice)	32°F
Vapor Density (AIR=1) Heavier Lighter	ND	Evaporation Rate (Butyl Acetate=1)	Slower
Solubility in Water	Complete	Appearance: Odor:	Clear solution Odorless

Section IV - Fire and Explosion Hazard Data (Nonflammable)

Flash Point: None	Flammable Limits: LEL: N/A UEL: N/A	DOT Hazard Class: Not Regulated	Marking: "Keep From Freezing"
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Special Firefighting Properties: N/A Unusual Fire Explosion: N/A

Section V - Reactivity Data

Hazardous Polymerization: Won't occur Stability: Stable Incompatibility: N/A
Hazardous Decomposition: N/A Conditions to Avoid: N/A

Section VI - Health Hazard Data, Toxicity Data

Route(s) of Entry: None for skin, inhalation and ingestion.
Carcinogenicity NTP: No IARC Monographs: No OSHA Regulated: No Signs Symptoms: N/A
Health Hazards (Acute and Chronic): N/A Medical Conditions: N/A

EMERGENCY AND FIRST AID PROCEDURES: Eyes: Flush with water. Skin: Wash with soap/water. Remove contaminated clothing.
Ingestion: Induce vomiting. Seek immediate medical attention. Inhalation: Remove to fresh air.

SUPPLEMENTAL INFORMATION

To comply with New Jersey DOH Right-To-Know labeling law (N.J.A.C. 8:59 - 5.1 & 5.2)

CAS. No.:

7732-18-5
68131-39-5
64-02-8
Not Avail.*
Not Avail.*
Contents partially unknown

CHEMICAL INGREDIENTS:

Water
Alcohol ethoxylate
Tetrasodium EDTA
Alkoxylated linear alcohol
Hydroxyethyl cellulose

HMIS HAZARD RATING

Health 1	Flammability 0	Reactivity 0	Personal Protection A
HAZARD INDEX: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe			
PERSONAL PROTECTION CODE			
A=Safety Glasses			

Section VII: Precautions for Safe Handling and Use

IN CASE MATERIAL IS RELEASED OR SPILLED: Flush area with water. Mop up and hold for disposal.

WASTE DISPOSAL METHOD: Any method in accordance with local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container sealed when not in use. Do not store at elevated temperatures.

OTHER PRECAUTIONS: Eye protection recommended.

Ventilation: N/A

Section VIII: Control Measures

RESPIRATORY PROTECTION: None needed

PROTECTIVE GLOVES: N/A

EYE PROTECTION: Use safety eyewear including side shields, face shields, or chemical splash goggles (ANSI Z-87.1 or approved equivalent).

OTHER PROTECTIVE EQUIPMENT: N/A

WORK HYGIENIC: N/A

PRODUCT DATA

FIBERSET® PM

DESCRIPTION

Product No.: 7470 white, 7475 clear, 7480 blue

Fiberset PM is a pre-mixed "lockdown" sealing treatment for microscopic residual fibers present after removal of asbestos containing material (ACM). Fiberset PM is a ready-to-use, class "A" fire rated coating that provides a flexible barrier over residual fibers to insure final air clearance. Fiberset PM and Fiberset FT are the only UL® classified (#R13770) lockdowns accepted for fluted, cellular and corrugated deck assemblies. Fiberset PM is compatible with most leading brands of replacement fireproofing and flooring adhesives. Fiberset PM can also be used to penetrate asbestos contaminated soil in crawl spaces. Fiberset PM is a water based nontoxic coating which employs advanced 100% acrylic resin technology to extend the life expectancy of airless spray equipment.

UL Classification: ASTM E-119

UL Category: Encapsulant Materials



PROPERTIES

- Volatile: Water
- Average particle size: 0.2 microns
- Viscosity @ 77°F: 55-60 Krebs Units
- Weight per gallon @ 77°F: 8.5 lbs.
- Film Hardness: Excellent
- Film Flexibility: Excellent
- Impact Resistance: Excellent
- Water resistance of dry film: Excellent
- Bond Strength to concrete/steel: Excellent
- Coverage: not less than 500 sq. ft./gal.
(as specified by UL)
- Flash point: Tag Closed Cup, Non-combustible water based product.
- Dry Time 1 - 2 hours
- Shelf Life: @ 77°F, 36 months minimum, (in original factory sealed containers).
- Odor: virtually odorless.
- Finish: slight gloss
- Packaged: 5, and 55 gallon containers

APPLICATION INFORMATION

LOCKDOWN: Sealing microscopic residual fibers after asbestos removal is mandatory on every project. Prior to post-removal air monitoring, apply one coat to all exposed surfaces. Fiberset PM has been accepted as part of a UL Classified Fireproofing System for use with Retro-Guard® manufactured by W.R. Grace & Co., Conn.

PULLDOWN BY MISTING: Pulldown by misting the contaminated air is an effective technique prior to post removal air-monitoring. To pull down free-floating asbestos fibers effectively, stand in the center of the room and hold the spray gun as close to the ceiling as possible. A mist should be sprayed parallel to the ceiling in every direction or in a circle. Apply one coat to the polyethylene walls and floor.

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APPLICATION PROCEDURES FOR FIBERSET PM

PREPARATION

Prior to application, stir thoroughly to achieve a uniform consistency. Fiberset PM is pre-mixed, water addition is not necessary.

APPLICATION EQUIPMENT

Professional models of all brands of spray equipment can be used to successfully apply Fiberset PM. Use the settings below when applying Fiberset PM:

Pressure: 2500-2700 psi
Hose length: 100 feet
Hose diameter: 1/4 inch
Tip size: .015 - .025 (orifice size)
Fan size: 12 inches

CLEAN UP

Tools and drippings should be cleaned with soap and water before coating dries.

SHIPPING AND STORAGE INFORMATION

Shelf Life: 3 years in sealed containers

Storage Temperature: Keep from freezing. Store in a dry place at temperatures between 40°F - 100°F

Flash Point: None.

Note: Fiberset PM is part of a UL Classified Fireproofing System for use with Classified types RG and RG1 cementitious mixtures manufactured by Zonolite Construction Products Division W.R. Grace & Co., Conn.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL USE ONLY
KEEP FROM FREEZING**

Cautions: Approved respirators must be used to prevent inhalation of asbestos fibers that may be present in the air. Protective clothing should be worn. Tools and drippings should be cleaned immediately with clean, soapy water before the coating dries. Careful consideration should be given to all Environmental Protection Agency (EPA), OSHA and state regulations in effect at the time of application of Fiberset PM. The EPA, through the Office of Pesticides and Toxic Substances has issued reports headed "Guidance for Controlling Friable Asbestos-Containing Materials in Buildings," EPA 560/5-85-024, June 1985, and "Managing Asbestos in Place, A Building Owner's Guide to Operations and Maintenance Programs for Asbestos Containing Materials," 20T-2000, July 1990, containing the proper data, cautions, and procedures for asbestos control. Copies are available from the Environmental Assistance Division, TS-799, TSCA Assistance Information Service, U.S. EPA, 401 M Street SW, Washington, DC 20460, (202) 554-1404.

Keep from freezing. Do not store at temperatures above 100°F.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of this product are beyond our control. Neither Fiberlock Technologies, Inc., nor our agents shall be responsible for the use or results of use of this product or any procedures or apparatus mentioned. We recommend that the prospective user determine the suitability of Fiberset PM for each specific project and for the health and safety of personnel working in the area.

MATERIAL SAFETY DATA SHEET

(Essentially similar to OSHA form 174, Sept. 1985 - For Compliance with OSHA's Hazard Communication Standard, 29CFR 1910.1200)

Section I - Product Identity:

Manufacturer's Name:
Fiberlock Technologies, Inc.
150 Dascomb Road
Andover, MA 01810

Fiberset FT® (6470,6475) Fiberset PM (7470,7475, 7480)

Date of Preparation: September 15, 2002
Information Telephone Number: (978) 623-9987
Emergency Telephone Numbers
Weekdays: (978) 623-9987
After hours, weekends & holidays: (978) 887-5926, or
"CHEM-TEL" Emergency Contact Number: (800) 255-3924

Section II - Hazardous Ingredients/Identify Information

HAZARDOUS COMPONENT	COMMON NAME(S)	%	CAS NO.	OSHA OR PEL	ACGIH TLV
Titanium dioxide	(same)	<2.0	13463-67-7		ACGIH TWA 10 mg/m ³

Section III - Physical/Chemical Characteristics [See reference note(s) No. 1, 2 on Reverse]

Boiling Points of Major Constituent: (Water)	212°F	Specific Gravity (H ₂ O=1) Wgt./gal.	8.5
Vapor Pressure (mm Hg) @ 68°F	17	Melting Point Water (Ice)	32°F
Vapor Density (AIR=1) Heavier Lighter	X	Evaporation Rate (Butyl Acetate=1)	Slower
Solubility in Water	Total	Appearance: Odor:	liquid: slight odor Maximum VOC's 100 g/l (.09 lbs/gal)

Section IV - Fire and Explosion Hazard Data (Nonflammable)

Flash Point: Noncombustible	Flammable Limits: LEL: N/A UEL: N/A	DOT Hazard Class: Not Regulated	Marking: "Keep From Freezing"
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Section V - Reactivity Data

Hazardous Polymerization: Will not occur.

Stability: Stable

Incompatibility: Avoid Contact with: Strong oxidizing agents (e.g., nitric acid, permanganates), etc.

Hazardous Decomposition Products: Some carbon monoxide.

Section VI - Health Hazard Data, Toxicity Data

Route(s) of Entry: N/A

Carcinogenicity?: No

Health Hazards (Acute and Chronic): N/A

EFFECTS OF OVEREXPOSURE: Inhalation: Vapors or spray mists may be slightly irritating to eye, nose, throat, and mucous membranes of respiratory tract producing symptoms of headache, nausea in poorly ventilated areas. Skin Contact: Prolonged or repeated contact with coating may cause slight skin irritation. Eye Contact: Direct contact; inconsequential eye irritation.

EMERGENCY AND FIRST AID PROCEDURES: Inhalation: Remove to fresh air. Eye and Skin Contact: Immediately flush eyes with plenty of water for at least 15 minutes and consult physician; wash skin thoroughly with soap and water. If drenched, remove and wash clothing before reuse. Ingestion: If swallowed, call a physician immediately. If victim is conscious, give 2 glasses of water. Never give anything to an unconscious person. Treat symptomatically.

TOXICITY INFORMATION: The effects of overexposure shown in Section VI are based on acute toxicity profiles for a number of special emulsions that are compositionally similar to this product. Typical values are: Rat, oral LD 50: >5.0 g/kg; Rabbit, dermal LD 50: >5.0 g/kg; Rabbit, skin irritation: practically non irritating -72 hour Mean Irritation Score = 0 to 2; Rabbit, eye irritation: Inconsequentially irritating.

SUPPLEMENTAL INFORMATION

To comply with New Jersey DOH Right-To-Know labeling law (N.J.A.C. 8:59 - 5.1 & 5.2)

CAS. No.:
7732-18-5
13463-67-7
57-55-6
Not Avail.*
Not Avail.*
*Contents partially unknown

CHEMICAL INGREDIENTS:
Water
Titanium dioxide (#6470 & 7470 only)
Propylene glycol
Proprietary defoamer
Acrylic resin solids

HMIS HAZARD RATING			
Health 1	Flammability 0	Physical Hazard 0	Personal Protection A
HAZARD INDEX: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe			
PERSONAL PROTECTION CODE			
A=Safety Glasses			

Section VII: Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Keep unnecessary people away. Floor may be slippery; use care to avoid falling. Dike and contain material with inert material (e.g. sand, earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for disposal. Keep spills and runoff out of municipal sewers and open bodies of water.

WASTE DISPOSAL METHOD: The coating and any contaminated diking material should be thoroughly air dried and collected into drums. The drums should then be sealed and properly labeled with waste designation and landfill or incinerated according to current local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Maximum storage temperature 100°F. Keep closure tight and container upright to prevent leakage. Precautionary Labeling: "Keep from Freezing".

OTHER PRECAUTIONS: Do not get in eyes. Avoid skin contact. Prevent prolonged or repeated breathing of vapors or spray mists. Do not handle until the manufacturer's safety precautions and label instructions have been read and understood. Avoid breathing sanding dust.

Section VIII: Control Measures

RESPIRATORY PROTECTION: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered. Use approved chemical/mechanical filters designed to remove particulates in open and restricted ventilation areas. Use MSHA/NIOSH-approved airline type respirators or hood in confined areas.

VENTILATION: Sufficient ventilation, in pattern and volume, should be provided to keep the air contaminant concentration below applicable exposure limits. All application areas should be ventilated in accordance with OSHA regulation 29CFR Part 1910.94.

PROTECTIVE GLOVES: Impervious gloves should be worn if prolonged skin contact is likely. Use neoprene or rubber gloves to prevent prolonged skin contact.

EYE PROTECTION: Use safety eyewear including side shields, face shields, or chemical splash goggles (ANSI Z-87.1 or approved equivalent).

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Use protective cream if prolonged skin contact is likely.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using the washroom. Food or beverages should not be consumed anywhere this product is being applied.

References:

1. Sax, N.I., "Dangerous Properties of Industrial Materials", 8th ed., Van Nostrand Reinhold Company, Inc., NY, 1992.
2. American Conference of Governmental Industrial Hygienists, "TLV's and Biological Exposure Indices" for the current year (published annually).
3. U.S. Code of Federal Regulations (CFR) U.S. Dept. of Labor, No. 29, Parts 1900 to 1910.1200. OSHA Communications Standard 29 CFR 1910.1200.
4. Sax, N.I., R.J. "Hazardous Chemicals Desk Reference", Van Nostrand Reinhold Co., Inc., NY, 1987.
5. Fire Protection Guide to Hazardous Materials, 12th edition, National Fire Protection Association, Quincy, MA, 1997.
6. Title III List of Lists, U.S. Environmental Protection Agency publication EPA 560/4-90-011, January 1990.

MATERIAL SAFETY DATA SHEET – Spray Rite 8 oz. Spray Adhesive

GLT Products
6810 Cochran Road
Solon, OH 44139

Date Prepared: 06/05/06
Emergency Phone: Chem-Tel 800/255-3924
Information Phone: 440/914-1122

Section 1 – Product Identification

Name: Spray Rite 8 oz. Spray Adhesive

Section 2 – Hazardous Ingredients

Ingredient	CAS No.	OSHA PEL	TWA TLV	STEL	SARA 313	WT % (Optional)
Acetone	67-64-1	750	750	1000		20 – 30
Propane	74-98-6	1000	1000	Asphyxiant		20 - 30
Hexane	110-54-3	50	50		X	15 – 20
Isobutane	75-28-5	N/A	800	N/A		5 --15

Section 3 – Health Hazard Information:

Effects of Overexposure:

Inhalation: Can cause irritation to the nose and throat. High concentrations may cause headaches, dizziness, nausea and confusion.

Eye: May cause eye irritation.

Skin: May cause transient skin irritation.

Ingestion: May cause gastrointestinal irritation.

Other: Reports have associated prolonged and repeated occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Section 4 – First Aid Procedures

Swallowing: If swallowed, do not induce vomiting. Call poison control center, hospital emergency room or physician immediately.

Inhalation: Remove to fresh air immediately. If breathing has stopped, give artificial respiration. Keep warm and quiet. Get medical attention.

MATERIAL SAFETY DATA SHEET – Spray Rite 8 oz. Spray Adhesive

Eye: Flush with large amounts of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes. Get medical attention.

Skin: Remove contaminated clothing. Wash affected area with soap and water. Get medical attention if irritation persists.

Section 5 – Physical Data

Boiling Point	-40°F to 160°F
Vapor Pressure PSIG @ 70°F	70 approx.
Vapor Density	2.5
Appearance and Odor:	Clear light amber solution
Specific Gravity:	0.6
Melting Point:	N/A
% Volatile:	80%

Section 6– Fire and Explosion Data

Flash Point and Method: -40°F TCC	Flammable Limits: 1.8 LEL 12.0 UEL
Unusual Fire and Explosion Hazards:	Aerosol cans may rupture when heated.
Extinguishing Media:	Use water fog, dry chemical, foam or carbon dioxide.
Special Fire Fighting Procedures:	Heating of contents above 130°F may cause cans to burst.

Section 7 – Reactivity Data

Stability:	Stable
Conditions to Avoid:	Storing in high temperatures or exposing to open flames.
Incompatibility (Conditions to avoid):	None
Hazardous Decomposition Products:	Carbon Monoxide and Carbon Dioxide.
Hazardous Polymerization:	None

Section 8 – Spill or Leak Information

MATERIAL SAFETY DATA SHEET – Spray Rite 8 oz. Spray Adhesive

Steps to be taken in case material is released or spilled: Eliminate all sources of ignition. Permit only properly protected workers in the area with skin/eye protection and self contained breathing gear. Absorb small spills with inert absorbent material. Contact state, local, and federal agencies to ensure compliance with current regulations.

Waste disposal method: Waste must be disposed of according to local, state and federal regulations.

Section 9 – Personal Protection Information

Respirator Protection: If the LTV's listed in Section 2 are exceeded, use a properly fitted NIOSH/MSHA approved respirator.

Ventilation: Local and mechanical ventilation are recommended to keep any hazardous ingredients listed in Section 2 below the lowest exposure limit.

Hand Protection: Resistant plastic or rubber recommended.

Eye Protection: Wear safety chemical splash goggles.

Other Protective Equipment: Not likely to be needed.

Section 10 – Special Precautions

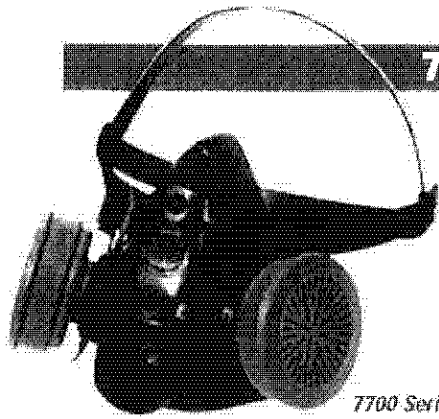
Precautions To Be Taken In Handling and Storage: Store cans in a cool, dry and well ventilated area away from all ignition sources. Prolonged exposure of cans to elevated temperatures may cause cans to rupture or burst.

Section 11 – Disclaimer

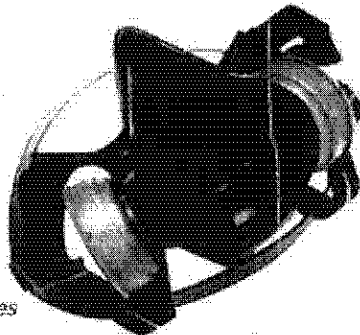
The information presented in this MSDS represents the most accurate known presentation of this product. However, due to the many and diverse variables in its end use, it is the end users responsibility to determine the suitability of this information for the adoption of the safety precautions as may be necessary.

Half Masks

7700 AND 5500 SERIES HALF MASKS



7700 Series



The North 7700 half mask is the industry standard for comfort, fit and reliability. For over 25 years the North 7700 has proven itself, protecting workers in some of the harshest environments. Why settle for a copy, when you can have the original?

The North 5500 is the economical choice for the occasional user, contractors or as a "visitor's mask". The North 5500 has many of the same features as the 7700 mask, but made with an elastomeric material.

Cartridges and filters sold separately. Refer to pages 14 and 15 for a complete listing.

FEATURE	FUNCTION	BENEFIT
GENERAL		
Can be adapted to PAPR or Supplied Air	• Flexible for multiple work environments	• No need to inventory, train workers and fit test them on several respirators
Only 9 replacement parts – and all parts are replaceable	• Quick and easy to strip down and clean • Less inventory	• Cost savings in maintenance
Both the 7700 & 5500 are latex free	• No latex allergens	• Safe for your workers with allergies
Low "dead air" space	• Less exhaled breath is re-breathed	• Increased worker productivity
Strategic placement of exhalation valve	• More breath is exhaled out of the mask faster	• Workers feel cooler, more comfortable
FACESEAL		
Variable thickness in sealing area	• Nose area is flexible enough to conform to the bridge of the nose, but not too thin to collapse • Built up chin area supports the mask, maintains fit even while the wearer is talking • Sides are medium thickness to maintain a seal without pressure points	• Superior comfort without sacrificing fit
Wide, contoured sealing area	• Improved fit for more facial types	• More people will fit in a medium, so you have less inventory of alternate sizes
Overlapping sizes	• Fits a wider range of facial types	• Get the best fit possible for each of your workers
HEAD STRAP		
Expanded angle on cradle suspension is fixed into position	• More secure fit that will not slip • Workers can not wear it incorrectly	• Ideal for workers in active jobs • Less training on proper donning
Headstraps have dual elasticity Top straps have less stretch Bottom straps provide more stretch	• Holds the respirator in place • No constraints as worker turns head side to side	• More secure fit • More comfortable, will not pinch • Will not pull on the mask and jeopardize the seal
"Parking" feature	• Mask is still handy and at the ready when not worn	• Workers can get back to work quickly after a break
MASK MATERIAL		
7700 is 100% silicone – no filters	• No chance of latex allergens • More durable, greater chemical resistance • More comfortable than other masks	• Worry free for you and your workers • Like new after other masks have quit • Increased user acceptance
5500 is elastomeric with a silicone blend	• Economical • Softer than other elastomeric masks • No chance of latex allergens	• Ideal for occasional use or for sub-contractors • More comfortable and better fit than other economy masks

Half Masks



All North Half Masks can be adapted to PAPR or Supplied Air.

PART NO.	DESCRIPTION	PACKAGING
770030S, M, L	Silicone half mask. Sizes small, medium and large.	Each
550030S, M, L	Elastomeric half mask. Sizes small, medium and large.	Each

5500 CONVENIENCE PACKS



North has taken the most popular combinations of half mask, cartridges and filters and put them all together in one "convenient package" – the North 5500 Series Convenience Packs. Convenience Packs are ideal as a "visitor" respirator you can hand out to your sub-contractors, plant guests and other occasional users of respirators.

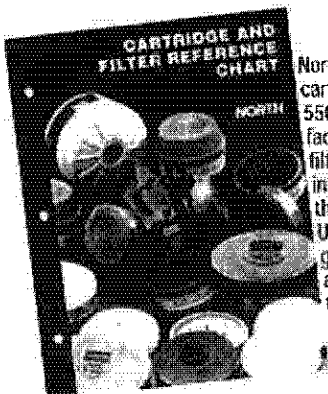
Not available in Canada

FEATURE	FUNCTION	BENEFIT
Half mask, cartridges and/or filters in one package	• Complete and convenient	• No worry that something is missing • You do not need to bundle your own respirator handout
All parts are replaceable Cartridges and filters are replaceable	• Priced as a disposable, but can be reused if you choose	• Flexibility for your worksite and sub-contractors.

Each respirator contains one mask, one set of cartridges and/or filters, and one set of filter holders if a prefilter is included. Refer to pages 14 and 15 for replacement cartridges and filters, and descriptions of these air-purifying elements (cartridges and filters).

PART NO.	DESCRIPTION	PACKAGING
<i>Common applications: Exposure to dust, mists and fumes, including asbestos and lead, and atmospheres that contain oil based aerosols.</i> 5580P100S, M, L	Half mask respirator complete with P100 filters. Sizes small, medium and large.	Each
<i>Common applications: Most paint and pesticide applications. Exposure to organic vapors such as MEK and isocyanates, plus particulates such as dusts, mists and fumes.</i> 5501R95S, M, L	Half mask respirator complete with organic vapor cartridges and N95 prefilters. Sizes small, medium and large.	Each
<i>Common applications: Exposure to organic vapors such as MEK and isocyanates. Will not protect against particulates such as dusts, mists and fumes.</i> 5501S, M, L	Half mask respirator complete with organic vapor cartridges. Sizes small, medium and large.	Each
<i>Common applications: Exposure to organic vapors such as MEK and isocyanates plus acid gases such as chlorine, sulfur dioxide, and hydrogen fluoride. Will not protect against particulates such as dusts, mists and fumes.</i> 5503S, M, L	Half mask respirator complete with organic vapor /acid gas cartridges. Sizes small, medium and large.	Each
<i>Common applications: Exposure to vapors and/or gases plus particulates such as dusts, mists and fumes including asbestos and lead, and atmospheres that contain oil based aerosols. The Defender™ also offers protection from formaldehyde.</i> 5581P100S, M, L	Half mask respirator complete with organic vapor cartridge/P100 filter. Sizes small, medium and large.	Each
5583P100S, M, L	Half mask respirator complete with organic vapor /acid gas cartridges/ P100 filters. Sizes small, medium and large.	Each
555CP100S, M, L	Half mask respirator complete with Defender™ multi-contaminant cartridges/P100 filters. Sizes small, medium and large.	Each

Cartridges/Filters for Air-Purifying Respirators



North offers a complete line of cartridges and filters for the North 5500, 7700, 5400 and 7600 Series facepieces. All cartridges and filters listed below are interchangeable with any of these masks. Filters for Limited Use respirators, canisters for gas masks, and PAPR cartridges are listed in this catalog with those products.

NORTH ESLIFE™ PROGRAM FOR CARTRIDGE CHANGE SCHEDULES

OSHA's Standard for Respiratory Protection, 29 CFR 1910.134, requires Employers to implement a change schedule for all vapor and gas cartridges when there isn't an end-of-service life indicator on the cartridge. This schedule must be site specific and take into consideration worksite humidity, worker breathing rate, as well as contaminant concentrations.

The North esLife Program is designed to help you with your cartridge change schedule, providing information on a cartridges life based on your worksite parameters. Visit the North web site www.northsafety.com to learn more and try the North esLife Program.

PART NO.	DESCRIPTION	PROTECTION FROM	PACKAGING
GAS AND VAPOR CARTRIDGES			
75SC	Defender™ Multi-Purpose	Organic vapors, ammonia, methylamine, formaldehyde and acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide)	Pair
N75001	Organic Vapor	Organic vapors	Pair
N75002	Acid Gas Cartridge	Acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide) and formaldehyde.	Pair
N75003	Organic Vapor & Acid Gas	Organic vapors and acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide)	Pair
N75004	Ammonia & Methylamine	Ammonia and methylamine	Pair
N750052	Mercury Vapor Cartridge with ESLI	Mercury vapor and chlorine with End-of-Service Life Indicator (ESLI) for mercury	Pair
COMBINATION GAS AND VAPOR CARTRIDGES WITH P100 PARTICULATE FILTERS			
75SCP100	Defender™ Multi-Purpose with P100	Organic vapors, ammonia, methylamine, formaldehyde and acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide); and 99.97% filter efficiency for all particulates	Pair
7581P100	Organic Vapor with P100	Organic vapors; and 99.97% filter efficiency for all particulates	Pair
7582P100	Acid Gas with P100	Acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide) and formaldehyde; and 99.97% filter efficiency for all particulates	Pair
7583P100	Organic Vapor & Acid Gas with P100	Organic vapors and acid gases (chlorine, hydrogen chloride, sulfur dioxide, hydrogen sulfide [escape], hydrogen fluoride and chlorine dioxide); and 99.97% filter efficiency for all particulates	Pair
7584P100	Ammonia & Methylamine with P100	Ammonia and methylamine; and 99.97% filter efficiency for all particulates	Pair
75852P100	Mercury Vapor with ESLI and P100	Mercury vapor and chlorine with End-of-Service Life Indicator (ESLI) for mercury; and 99.97% filter efficiency for all particulates	Pair

Cartridges/Filters for Air-Purifying Respirators



PART NO.	DESCRIPTION	PROTECTION FROM	PACKAGING
PARTICULATE FILTERS			
7580P100	P100	99.97% filter efficiency for all particulates	Pair
75FP100	Pancake, Low profile P100 filter for use under welding helmets	99.97% filter efficiency for all particulates	Pair
75FP100NL	Pancake with odor relief: Low profile P100 filter for use under welding helmets	99.97% filter efficiency for all particulates; plus relief from odors caused by nuisance levels of organic vapors, acid gases and ozone	Pair
7506N95	N95 Prefilter	95% filter efficiency for non-oil based aerosol particulates	10 per Pack
7506R95	R95 Prefilter	95% filter efficiency for all particulates. Restricted to 8 hours service life if used in atmospheres containing oil-based aerosols	10 per Pack
7506N99	N99 Prefilter	99% filter efficiency for non-oil based aerosol particulates	10 per Pack
PARTICULATE FILTER ASSEMBLIES			
7535FP100	Stack Pack: Pancake with Adapter	99.97% filter efficiency for all particulates. Includes one pair of N750035 adapter to attach the Pancake to North cartridges. May not be used with the Defender cartridges.	5 Pair Filters & 1 Pair adapter
7531N95	N95 Filter Assembly	95% filter efficiency for non-oil based aerosol particulates. Includes 7506N95 prefilters, N750027 filter covers and N750015 filter retainers for use on half mask or full facepiece when cartridges are not used.	1 Pair
7531R95	R95 Filter Assembly	95% filter efficiency for all particulates. Restricted to 8 hours service life if used in atmospheres containing oil-based aerosols. Includes 7506R95 prefilters, N750027 filter covers and N750015 filter retainers for use on half mask or full facepiece when cartridges are not used.	1 Pair

FILTER EFFICIENCIES

The National Institute of Occupational Safety and Health (NIOSH) classifies filters in two ways: type and efficiency. Using these classifications there are nine possible filter groups. The most commonly used are N95 as the most economical, and P100 providing the highest possible protection. The classifications are defined on the right.

Type

- N** Not for use in atmospheres that contain oil based aerosols.
- R** Restricted to eight hours of service life if used in atmospheres that contain oil based aerosols.
- P** Oil Proof. May be used without restrictions in atmospheres that contain oil based aerosols.

Efficiency

- 95** 95% minimum filter efficiency in removing particulates.
- 99** 99% minimum filter efficiency in removing particulates.
- 100** 99.97% minimum filter efficiency in removing particulates.

PART NO.	DESCRIPTION	PROTECTION FROM	PACKAGING
ACCESSORIES			
N750035	Pancake Adapter	Allows user to stack the Pancake on a North cartridge, converting the Pancake to a P100 prefilter. May not be used with the Defender.	Each
N750015	Filter Holder	Holds prefilters onto North half and full facepieces. Must be used with N750027 Filter cover.	Each
N750027	Seal Check / Filter Cover	Snaps on top of prefilters to hold them in place on North cartridges or on N750015 filter holder	Each
N750029	Shower Cap	For use with 7580P100. Deflects moisture during a "Decon" shower	Each

DuPont™ Tyvek®

The best balance of protection, durability and comfort

With Tyvek® you don't have to compromise. That's because Tyvek® delivers the best balance of protection, durability and comfort. Made using a proprietary manufacturing process, Tyvek® features an inherent barrier. So, unlike other protective apparel fabrics, which have either a film or coating that can be easily scratched or worn away, Tyvek® provides barrier through the entire fabric. As a result, your protection is not compromised unless the fabric has been completely torn—which isn't easy to do because of the strength and durability of Tyvek®. Make sure you're getting Tyvek®. Ask for it by name.

Barrier Protection You Can Trust, Durability That Isn't Easily Compromised

- Tyvek® is the industry standard for dry particulate barriers. Microscopic particles as small as 0.5 microns can't pass through Tyvek®—even after it's been abraded.
- Tyvek® is an inherent barrier—not easily scratched or worn away.

Comfort You'd Never Expect

Standing still, your body radiates heat and moisture vapor. So, it's no surprise that working in protective apparel that can't breathe escalates the problem dramatically and can affect productivity. It's called heat stress. And, it can seriously compromise your safety, especially in hazardous environments.

- Tyvek® lets air and moisture vapor pass through.
- Tyvek® is anti-static treated.
- Tyvek® breathes. Breathability is a key factor in reducing heat stress.
- Tyvek® is six times more breathable than microporous film garment materials.
- Tyvek® SoftWear™ is even more comfortable and four times as breathable as traditional Tyvek®.
- Tyvek® SoftWear™ has a dramatically softer feel.

Proven Performance and Quality

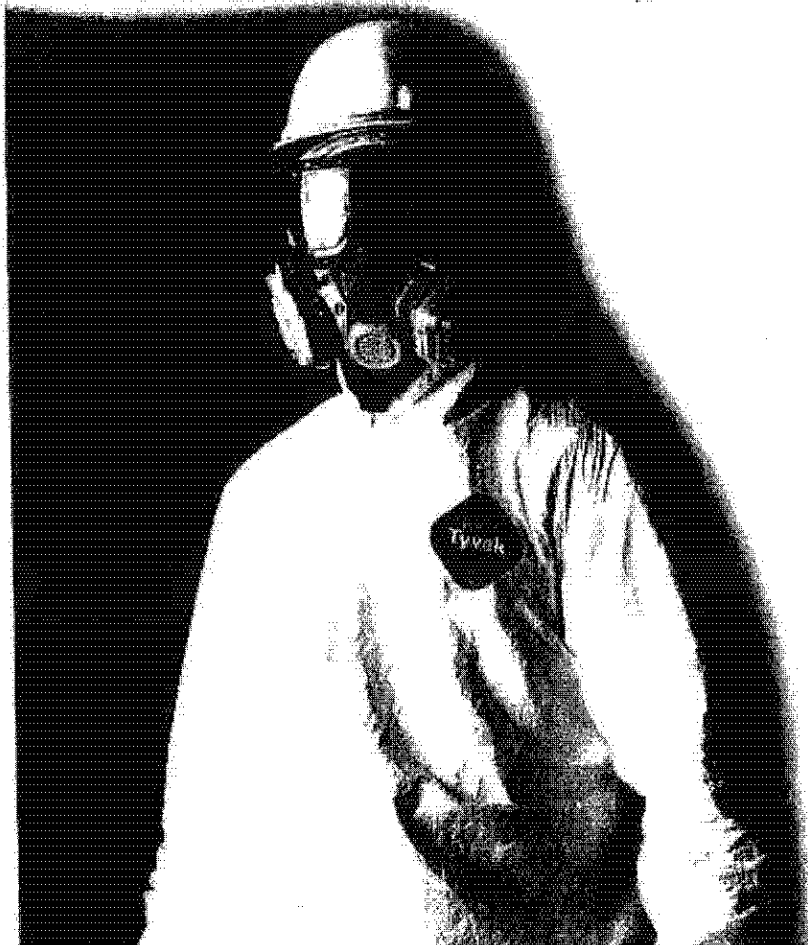
At DuPont Personal Protection, our goal is to combine scientific innovation with material, garment and manufacturing knowledge to create protective apparel that helps the people who wear PPE perform at their best. Both DuPont manufacturing facilities are certified to ISO 9001:1994.

Garment Styles To Meet Your Needs

- Tyvek® is available in a wide variety of garment styles, such as coveralls, labcoats, smocks and aprons.
- Tyvek® SoftWear™ is available in four coverall styles.

Wide Range of Applications

- General Maintenance Operations
- Construction & Agricultural
- Lead & Asbestos Abatement
- Environmental Clean-up
- Modesty Garments (Hospitals & Police)
- Environments where cross contamination is an issue
- Spray Painting
- Food Processing
- Mold Remediation
- Abrasive Blasting
- Forensics



The miracles of science

Tyvek® and Tyvek® SoftWear™

Physical Properties

PROPERTY	UNITS	TYVEK®	TYVEK® SOFTWEAR™
Basis Weight	oz/yd ²	1.2	1.2
Thickness	mil	5.0	6.0
Tongue Tear, MD	lbf	2.2	2.2
Tongue Tear, CD	lbf	2.3	2.2
Strip Tensile, MD	lbf	7.9	7.9
Strip Tensile, CD	lbf	8.7	8.1
Mullen Burst	psi	50	55
Porosity	l/m ² /min/mm H ₂ O	3.0	18.6
Static--Log R	log ohms	<9.8	<9.8
Flammability	16 CFR 1610	Class 1	Class 1

INDEX OF CODES:

< - less than

These results are measured using the latest ASTM test methods. Results will vary due to the changes in test methods. A two test of performance is in use.

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information.

It is the user's responsibility to determine the level of toxicity and the proper personal protective equipment needed. The information set forth herein reflects laboratory performance of fabrics, not complete garments, under controlled conditions. It is intended for information use by persons having technical skill for evaluation under their specific end use conditions, at their own discretion and risk.

Anyone intending to use this information should first verify that the garment selected is suitable for the intended use. In many cases, seams and closures have shorter breakthrough times and higher permeation rates than the fabric. Please contact the garment manufacturer for specific data. If fabric becomes torn, abraded or punctured, end user should discontinue use of garment to avoid potential exposure to chemical. **SINCE CONDITIONS OF USE ARE OUTSIDE OUR CONTROL, WE MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE AND ASSUME NO LIABILITY WHATSOEVER IN CONNECTION WITH ANY USE OF THIS INFORMATION.**

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WARNINGS:

- 1) Tyvek® is not flame-resistant and should not be used around heat, flame, sparks or in potentially flammable or explosive environments.
- 2) Garments made of Tyvek® should have slip-resistant or antislip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

For more information:

Visit our website at:

www.PersonalProtection.DuPont.com

DuPont Personal Protection

Fax-On-Demand Service at 1-800-558-9329

DuPont manufactures a complete line of garments for personal protection.

For more information, call **1-800-931-3456**

DuPont Personal Protection

 *The miracles of science*



Tychem®

CHEMICAL PROTECTIVE CLOTHING

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Tychem® SL

Lightweight protection of Tyvek® laminated with a chemical-resistant Saranex

Tychem® SL delivers effective protection against a range of chemical environments. Tychem® SL, utilizing Saranex® 23-P film laminated to Tyvek® brand protective material, is a lightweight, comfortable garment specifically designed for easy wear. Tychem® SL is ideal for chemical mixing, remediation, emergency medical response, paint spraying, and radioactive environments.

Tychem® SL is used in a variety of industries, including environmental clean-up operations, waste management, industrial plants, cleanroom applications, hazardous material response teams and other emergency services. General garment construction/wear guidelines should be followed according to the specific application.¹

Visibility

When workers wear high-visibility colors it improves how well they can be recognized and distinguished from the background. Obviously, safety is enhanced when workers can be clearly see co-workers. The Tychem® SL standard white color provides the highest level of visibility in low and dim light; however, it may have low contrast. White garments provide high contrast visibility in wooded areas and low contrast against snow. In a laboratory study, Tychem® SL received high overall ratings for visibility for dim light and bright light. Contrast was low against bright, light colored backgrounds, but very high against dark and outdoor backgrounds.²

Durability

Tychem® SL is rugged and durable even in cold temperatures. Tychem® SL offers little change in stiffness when exposed to extreme cold temperatures (-65°C to 20°C or -85°F to 6 °F measured per ASTM D747).

Permeation

Tychem® SL is the only fabric laminated with Saranex®. DuPont provides permeation data and technical support. DuPont provides permeation data and detailed information on how to perform against chemical classes in a variety of forms. Choose Fax-On-Demand, website, CD-ROM or our eye printed Permeation Guide³ for DuPont Tychem® Protec

Nuclear Environments

A study was conducted by Southwest Research Institute on fabrics' performance in potentially radioactive environments. The study of the fabrics' ability to resist water vapor and tritium gas penetration showed Tychem® SL was 150% more resistant than PVC after three hours of exposure. The study states, "When it is desired to penetrate tritium, data suggest that the wearer may work three hours in Tychem® SL, as opposed to only half an hour in other fabrics".

Permeation Data for ASTM Recommended List of Chemicals for Evaluating Protective Clothing Materials (ASTM F1001)

CHEMICAL NAME	PHYSICAL PHASE	AVERAGE NORMALIZED BREAKTHROUGH TIME (minutes)	AVERAGE PERMEATION RATE (µg/cm ² /minute)
Acetone	L	> 24	1.6
Acetonitrile	L	12	2.8
Ammonia	G	32	0.15
1,3-Butadiene	G	> 480	< 0.02
Carbon disulfide	L	immed.	>50
Chlorine gas	G	> 480	< 0.01
Dichloromethane	L	immed.	>50
Diethylamine	L	12	>50
N,N-	L	112	0.85

INDEX OF CODES

Dimethylformamide			
Ethyl acetate	L	14	0.54
Ethylene oxide	G	immed.	8.4
n-Hexane	L	146	0.48
Hydrogen chloride	G	> 480	< 0.1
Methanol	L	>480	<0.001
Methyl chloride	G	> 480	< 0.006
Nitrobenzene	L	102	2.3
Sodium hydroxide, 50%	L	> 480	< 0.1
Sulfuric acid (conc.)	L	> 480	< 0.1
1,1,2,2- Tetrachloroethylene	L	immed.	5.7
Tetrahydrofuran	L	immed.	>50
Toluene	L	immed.	25

> = greater than
< = less than
L = liquid, G = gas
Immed. = immediate
(<10 minutes)

Numbers reported are averages of samples tested by ASTM F739 test method. Sample results do vary and therefore averages for these results are reported.

CHEMICAL NAME	PHYSICAL PHASE	CAS #	AVERAGE NORMALIZED BREAKTHROUGH TIME (minutes)	CHEMICAL NAME	PHYSICAL PHASE	CAS #	AVERAGE NORMALIZED BREAKTHROUGH TIME (minutes)
Acetone	L	64-19-7	>480	Methanol	L	67-56-1	>480
Acetic anhydride	L	108-24-7	>480	Methyl bromide	G	74-83-9	>480
Acrylic acid	L	79-10-7	>480	Methyl chloride	G	74-87-3	>480
Acrylonitrile	L	107-13-1	>480	Methyl ethyl ketoxime	L	96-29-7	>480
Ammonia	L	7664-41-7	>480	Methyl t-butyl ether	L	1634-04-4	>480
Ammonium hydroxide, 28%-30%	L	1336-21-6	>480	n-Methyl-2-pyrrolidone	L	872-50-4	>480
Benzene	L	71-43-2	74	4,4'-Methylene bis (o-chloroaniline), sat. sol. in methanol	L	101-14-4	>480
Benzo[a]pyrene	S	50-32-8	>480	Mineral oil	L	8012-95-1	>480
Black liquor	L	123465-36-1	>480	Mineral spirits	L	64475-85-0	>480
Chemideize 727 ND	L	mixture	>480	Nicotine	L	54-11-5	450
Chlorine, 20 ppm	G	7782-50-5	>480	Nitric acid, 70%	L	7697-37-2	>480
Chloroacetone	L	78-95-5	480	Nitrogen dioxide	G	10102-44-0	>480
Chromic acid, 60%	L	1333-82-0	>480	Oleum, 40% free SO ₃	L	8014-95-7	>480
o-Cresol	L	95-48-7	>480	PCB	I	11097-69-1	>480
Crude oil	L	8002-05-9	>480	PCB 1%, Mineral spirits 99%	L	11097-69-1	>480
1,1-Dichlorotetrafluoroethane	L	374-07-2	>480	PCB 50%, Mineral oil 50%	L	11097-69-1	>480
Diethylaniline crude	L	91-66-7	>480				
Diethyl-m-toluidine crude	L	91-67-8	>480				
Ethylene glycol	L	107-21-1	>480				
Formalin (Formaldehyde)	L	50-00-0	>480				

37%)					PCB 50%, Trichlorobenzene	L	11097-69-1	>480
Formic acid	L	64-18-6	>480		50%			
Fuel oil	L	mixture	>480		PCB gas condensate	L	10097-69-1	401
Gluteraldehyde, 5% aqueous solution	L	111-30-8	>480		Phenol, 85%	L	108-95-2	>480
Green liquor	L	68131-30-6	>480		Phenyl ethyl alcohol	L	98-85-1	>480
Hexamethyldisilazane	L	999-97-3	>480		Phosphoric acid, 85%	L	7665-38-2	>480
Hydrazine	L	302-01-2	>480		Potassium acetate, sat. sol. in water	L	127-08-2	>480
Hydrochloric acid, 37%	L	7647-01-0	>480		Sodium hydroxide, 50%	L	1310-73-2	>480
Hydrofluoric acid, 48%	L	7664-39-3	>480		Sodium hypochlorite, 17%	L	7681-52-9	>480
Iodine	S	7553-56-2	>480		Sodium hypochlorite, 5.25%	L	7681-52-9	>480
Mercuric chloride, sat sol. in water	L	7487-94-7	>480		Sulfur dioxide	G	7446-09-5	>480
Mercury	L	7439-97-6	>480		Sulfuric acid	L	7664-93-9	>480
Methanesulfonic acid	L	75-75-2	>480		1,1,1,2- Tetrafluoroethane	L	811-97-2	>480
					Toluene-2,4- dijisocyanate	L	584-84-9	>480
					Triethylamine	L	121-44-8	>480
					White liquor	L	68131-33-9	>480

> = greater than, L = liquid, G = gas, S = solid

Physical Properties of Tychem® SL		Chemical Warfare Agents		
		AGENT	TIME	CUMULATIVE PERMEATION
Basis Weight (ASTM D3776-90)	3.6 oz/yd ²	HD, Sulfur Mustard	3 hours	<0.1 µg/cm ²
Thickness (ASTM D1777-75)	13 mils	L, Lewisite	6 hours	<0.1 µg/cm ²
Mullen Burst (ASTM D3786-87)	73 psi	GB, Sarin	6 hours	<0.00012 µg/cm ²
Breaking Strength Grab (md/cd) (ASTM D5034-90)	47/50 lbs	VX	12 hours	<0.00012 µg/cm ²
Tearing Strength Trapeziod (md/cd) (ASTM D1117-80)	9/8 lbs	Applied at 10g/m ² in 1µL drops at 22°C, 50%		
				< = less than

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For more information:

For specific permeation data and breakthrough times for other chemicals:

DuPont Protective Apparel

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DUPONT MAKES NO GUARANTEE OF RESULTS AND ASSUMES NO OBLIGATION OR LIABILITY WHATSOEVER IN CONNECTION WITH THIS INFORMATION.

It is the user's responsibility to determine the level of toxicity and the proper personal protective equipment needed. The information set forth herein

Fax-On-Demand Service
at 1-800-558-5907

Visit our website at:
www.TyvekProtectiveApprl.com

DuPont manufactures a complete line of chemical protective fabrics made of Tychem® and fabric made of Tyvek® for dry particulate protection. For more information, call 1-877-797-5907.

WARNINGS:

1) Tychem® BR is not flame-resistant and should not be used around heat, flame, sparks, or potentially flammable or explosive environments.

2) Garments made of Tychem® BR should have slip-resistant or antislip materials on the outer surface of boots, shoe covers or other garment surfaces in conditions where slipping could occur.

reflects laboratory performance of fabrics, not complete garments, under controlled conditions. It is intended for information use by persons having technical skill for evaluation under their specific end-use conditions, at their own discretion and risk.

Anyone intending to use this information should first verify that the garment selected is suitable for the intended use. In many cases, seams and closures have shorter breakthrough times and higher permeation rates than the fabric. Please contact the garment manufacturer for specific data. If fabric becomes torn, abraded or punctured, end-user should discontinue use of garment to avoid potential exposure to chemical. Since conditions of use are outside our control, we make no warranties, expressed or implied, including, without limitation, no warranties of merchantability or fitness for a particular use and assume no liability whatsoever in connection with any use of this information.

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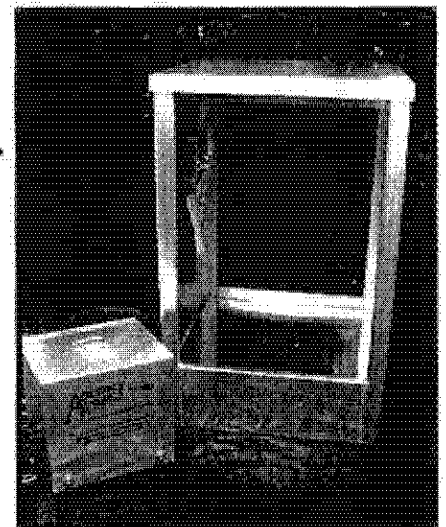
Water Filtration

Portable Shower #9105

The ORIGINAL COLLAPSIBLE telescoping decontamination shower is easily set up by two men in a matter of seconds.

Features:

- * MADE IN U.S.A.
 - * Lightweight aluminum construction
 - * 100 Micron drain filter
 - * Removable curtain
 - * Two (2) Handles for E-Z Handling
- Dimensions: (Open) 31" X 30" X 83"
Dimensions: (Closed) 31" X 31" X 48"
Weight: 100 lbs.



[CLICK HERE FOR THE PARTS LIST](#)

#9115 Two Stage Pump and #9105 Collapsed Shower

Two Stage Pump #9115

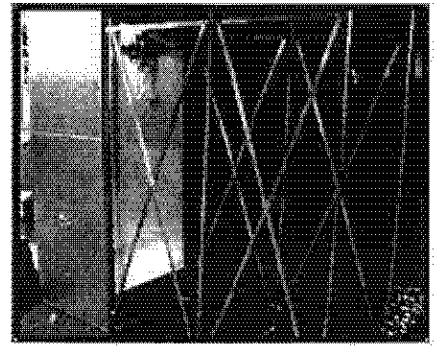
Features:

- * MADE IN U.S.A.
- * Enclosed aluminum container
- * Galvanized plumbing
- * 5 Micron and 50 Micron filtration
- * 12 Gallons per minute
- * Weight: 36 lbs.
- * 1/2 H.P. Motor

[CLICK HERE FOR THE PARTS LIST](#)

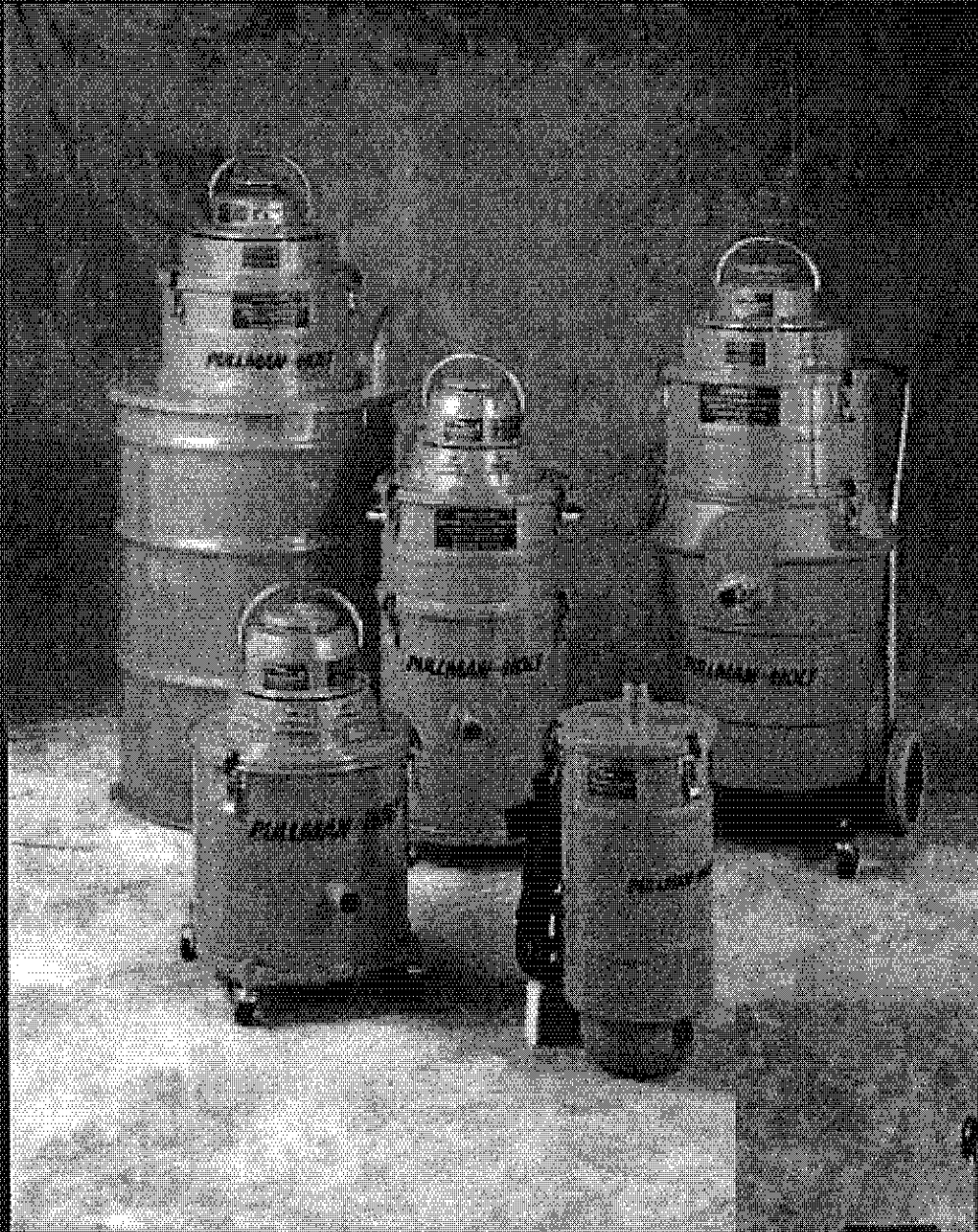
Entry/Exit Frame Model #9103

Decontamination frames are 32" wide which can be used to form "tunnels" from one contaminated area to another. They can also form a passageway from a decontamination trailer to a work area, or can be used with the Aero-Porta Shower for airlock chambers.



Aerospace America, Inc. ~ 900 Harry Truman Pkwy. ~ Bay City, MI 48706
1-800-237-6414 ~ 989-684-2121 ~ Fax: 989-684-4486

HEPA Vacuums



Asbestos
Abatement

Lead
Removal

Hazardous Mold
Remediation



QUALITY OF
EFFECTIVENESS

If you're doing professional abatement work, you need a continuous duty heavy grade vacuum. You need one that does the job right the first time, every time. Pullman-Holt understands your needs and has developed a line

of HEPA vacs that are up to whatever challenge you can put them to. From backpack style vacs

to huge drum canister vacs, there's something for every type of operation. We

know that, as a busy professional, you don't have time to shop for a new vacuum every time your old one breaks

down, not to mention the financial considerations. That's why we've designed

all Pullman-Holt HEPA vacs with quality and long service-life in mind. And,

we proudly stand behind our products with a warranty that's unsurpassed in

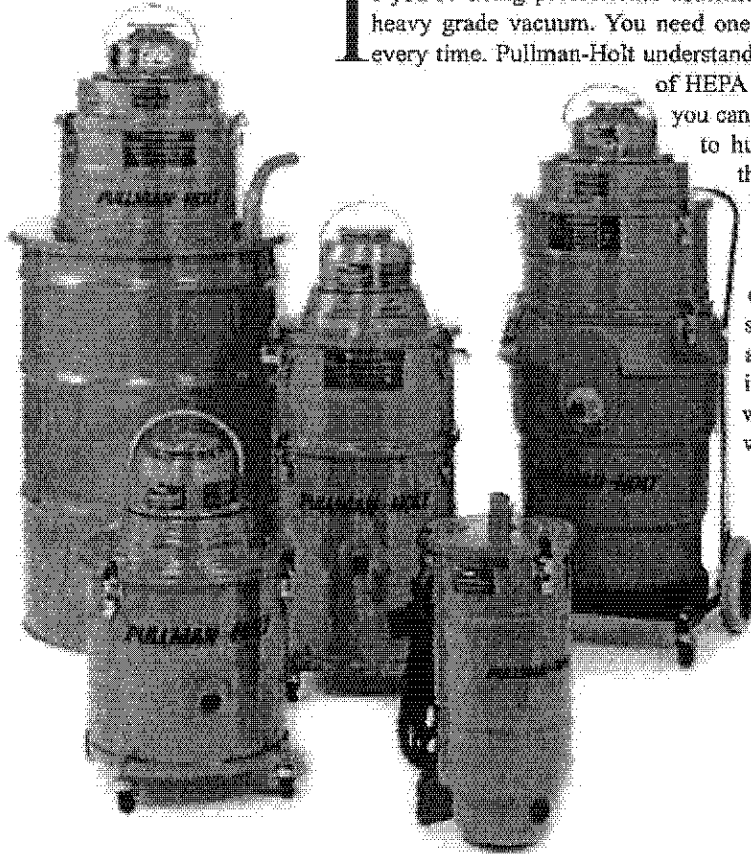
the safety/environmental industry. So, take a few minutes now to look

over this brochure and select the models that will best suit your needs. Once

you place your order and receive your Pullman-Holt vac(s), you won't have to think

about your vacuum equipment any more. It'll just be there, ready to go when you

are. Now that's peace of mind!



**MODEL
102ASB DA
(B160446)**



Our super heavy-duty drum style HEPA vac, model 102, sits atop a steel drum to create the ultimate in vacuum recovery capacity.

This unit features an unsurpassed 55 gallons of wet recovery capacity and a whopping 7.2 bushels of dry capacity. When the job seems daunting, the 102 Drum model fits the bill. *Drum not included.*

¥ **2HP, 2 stage by-pass motor, 11.1 AMPS, 105 waterlift, 110 CFM**

¥ **Louvered head diffuses exhaust air to prevent excessive air disturbance.**

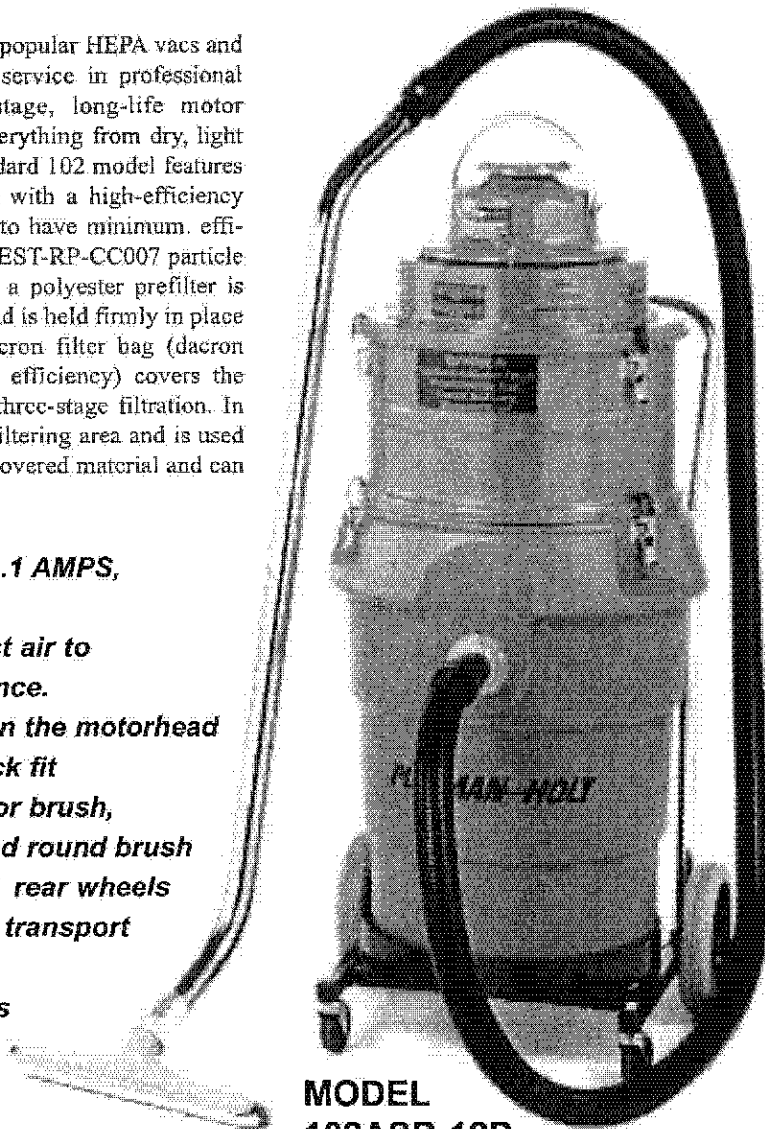
¥ **Complete tool kit; 10 hose, floor brush, metal wand, floor squeegee and round brush**

¥ **25 foot power cord**

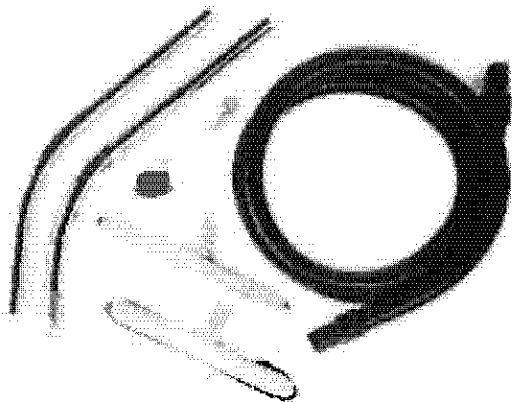
¥ **Vacuum motor warranty 3 years**

The 102ASB-12P, is one of our most popular HEPA vacs and a true work-horse for heavy-duty service in professional abatement work. Its 2HP, two-stage, long-life motor provides superior vacuum recovery for everything from dry, light particulates to wet, heavy debris. The standard 102 model features a heavy duty poly tank, and is equipped with a high-efficiency drop-in HEPA filter individually certified to have minimum efficiency of 99.99% at 3 microns (based on IEST-RP-CC007 particle count test method). For further filtration, a polyester prefilter is located on the bottom of the HEPA filter and is held firmly in place with Velcro fasteners. Additionally, a dacron filter bag (dacron material sheds dust to maintain vacuum efficiency) covers the entire spacer sleeve and HEPA filter for three-stage filtration. In addition our paper bag provides an extra filtering area and is used in trapping and holding the bulk of any recovered material and can be easily disposed (for dry use only).

- ¥ 2 HP, 2 stage by-pass motor, 11.1 AMPS, 105 waterlift, 110 CFM
- ¥ Louvered head diffuses exhaust air to prevent excessive air disturbance.
- ¥ Uses an air seal gasket between the motorhead and the tanks for a positive lock fit
- ¥ Complete tool kit; 10 hose, floor brush, metal wand, floor squeegee and round brush
- ¥ Vacmobile handle and cart w/8 rear wheels and 2.5 front casters for easy transport
- ¥ 25 foot power cord
- ¥ Vacuum motor warranty 3 years



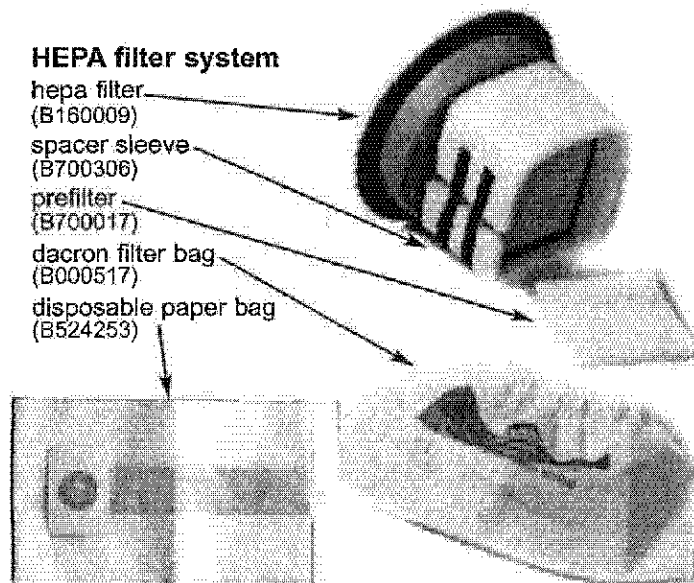
**MODEL
102ASB-12P
(B160421)**



- Wet/Dry Tool Kit: (B160056)**
- ¥5 two-piece metal wand (B521007)
 - ¥10 x 1.5 crushproof hose (B000311)
 - ¥ 14 floor brush tool (B527095)
 - ¥ 14 ABS floor squeegee (B527094)
 - ¥ Round dusting brush (B000394)

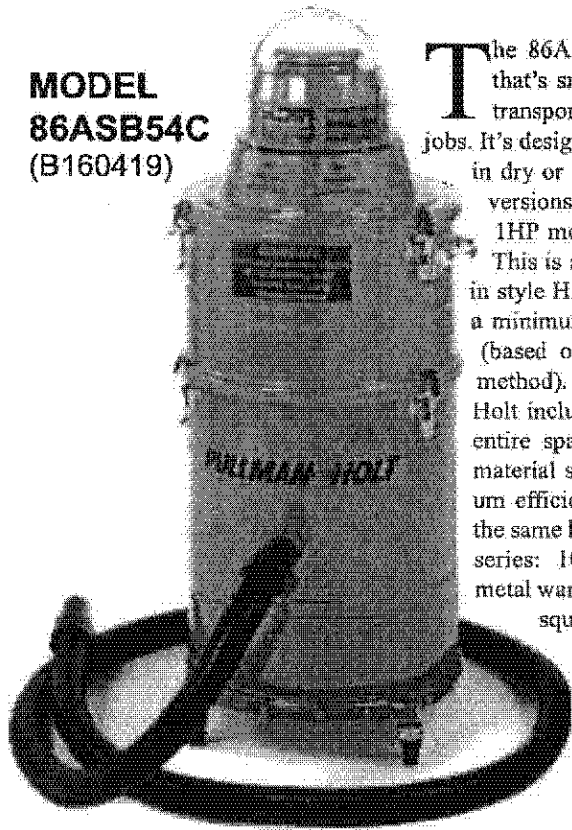
HEPA filter system

- hepa filter (B160009)
- spacer sleeve (B700306)
- prefilter (B700017)
- dacron filter bag (B000517)
- disposable paper bag (B524253)

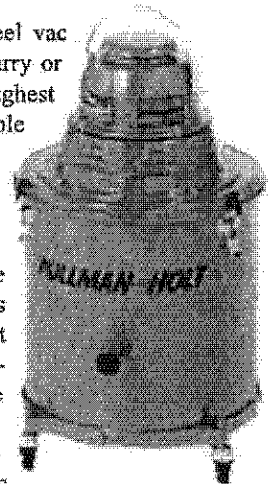


Survivors Series

**MODEL
86ASB54C
(B160419)**



The 86ASB dry and wet/dry, is a compact steel vac that's small and light enough to be easy to carry or transport, yet rugged enough to handle the toughest jobs. It's designed to work in tight areas and is available in dry or wet/dry (5-gal. wet recovery capacity) versions. The 86 is powered by an efficient 1HP motor that delivers a respectable 96cfm. This is a high-efficiency unit featuring a drop-in style HEPA filter individually certified to have a minimum efficiency of 99.97% at .3 microns (based on 1EST-RP-CC007 particle count test method). For full three-stage filtration, Pullman-Holt includes a dacron filter bag that covers the entire spacer sleeve and HEPA filter. (Dacron material sheds dust to maintain maximum vacuum efficiency.) And, the model 86ASB includes the same high quality tool kit included with our 102ASB series: 10'x1.5" crushproof hose; 5-foot two-piece metal wand; 14-inch ABS floor brush tool; 14-inch floor squeegee tool (not included with 86ASB5D4C); and a round dusting brush. For ease of use and portability, the 86ASB includes a 25-foot power cord.

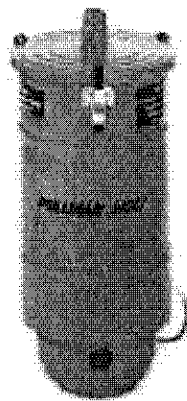
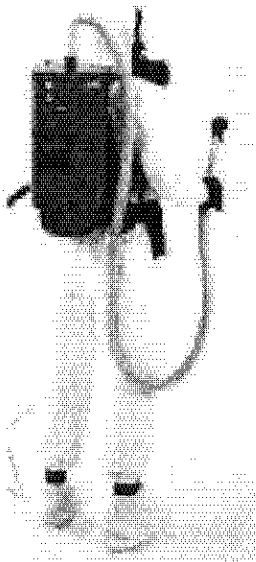


**MODEL
86ASB5D4C
(B160420)**

HEPA filter system

hepa filter (B526520)	spacer sleeve (B700344)	disposable paper bag (B700408)
prefilter (B527302)	dacron filter bag (B000517)	

**MODEL 30ASB
(B160000)**



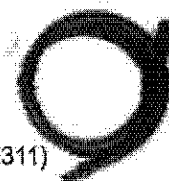
HEPA filter system

hepa filter (B700000)	disposable paper bag (B160007)
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When it comes to lightweight, portable backpack style vacs, the model 30ASB by Pullman-Holt is the preferred vac. Its 1HP motor delivers an impressive 101cfm. The model 30ASB is ideal for use in elevated or hard-to-reach areas. It makes quick work of sampling or glove bag work. And we've thought of everything when it comes to building power and efficiency right into this model. An air seal gasket between the motor-head and tanks forms a positive lock fit. As with many of our other HEPA vacs, the 30 includes a high-efficiency, drop-in style HEPA filter that is individually certified to have a minimum efficiency of 99.97% at .3 microns (based on 1BST-RP-CC007 particle count test method). The model 30 would not be complete, without its; 10' x 1.5" crushproof hose and round dusting brush. And a 50-foot power cord allows maximum range without relocating the plug to another power source. Consider the model 30ASB for your portable vacuum needs.

Dry Tool Kit: (B160423)

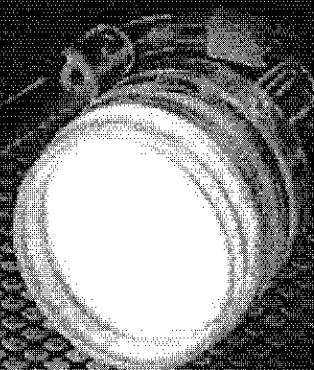
- ¥ 10 x 1.5 crushproof hose (B000311)
- ¥ Round dusting brush (B000394)



BDX II ABATEMENT AIR SAMPLER

*Introducing The BDX II,
the newest member of Sensidyne's
Gillian Line. A low cost, high
performance personal air sampling
pump for the lead and asbestos
abatement industry.*

- 0.5 - 3.0 LPM
- Anti-tamper control covers
- Internal components sealed from dust, fibers and moisture
- Easy calibration
- Portable
- Built-in electronic flow control adjustment
- Rechargeable battery pack
- UL approved



SENSIDYNE

800.451.9444

For the first time, the precision of Sensidyne's Gillian line is combined with the durability and economical pricing of BDX products in the BDX II. Designed for lead and asbestos monitoring, its compact, lightweight design is rugged and completely reliable, making it ideal for field applications.

The BDX II accurately monitors for asbestos using the MOSH Method 7400 or the OSHA reference sampling method. It will also monitor for lead using MOSH Methods 7082, 7105 or 7300.

FEATURES

Rugged and dependable construction will withstand the toughest industrial environments.

This pump is made to outlast and outperform larger and more costly pumps.

The built-in rotameter monitors flow rates over the entire flow range of 0.5 - 3.0 LPM.

The electronic flow control adjustment enables parts to last longer.

The rechargeable NiCad battery provides approximately 10 hours of reliable operation on a single charge and easily detaches from the pump body for recharging and/or quick field change.

Sealed flow adjustment and on/off switch protects the pump from moisture, dust and fibers.

STARTER KIT

A specially designed Starter Kit is available for the BDXXII and includes the pump and accessories, everything needed for accurate and reliable sampling.

Part #801863-120 Starter Kit

SPECIFICATIONS

General Specifications

Controls	Power Switch, Flow Control
Flow Indicator	Built-in rotameter, range 500-5000 cc/min, with 500 cc/div @ $\pm 20\%$ Full Scale accuracy
Additional features	See-through external filter housing, with filter monitoring lens; built-in belt clip
Dimensions	3.6" (W) x 3.9" (H) x 2.0" (D) [90 mm (W) x 100 mm (H) x 51 mm (D)]
Weight	21 oz (595 g)

Power Supply

Battery Pack	4.8 volt, 1.8 amp hour, sealed.
Battery Type	Rechargeable nickel-cadmium
Battery Charge Time	14 - 16 hours
Expected Battery Life*	300-500 charge-recharge cycles or 2.5 years (<20 hours weekly use) 1.5-2.5 years (20-39) hours weekly use) 1-1.5 years (40-60 hours weekly use)

**Inactivity for extended periods may shorten nickel-cadmium battery life. Battery life estimates are based on proper battery maintenance.*

OPERATING SPECIFICATIONS

Operating Range	500-3000 cc/min (0.5-3.0 LPM)
Flow Control	$\pm 5\%$ of set point over an 8-hour period, when operating at 2.0 LPM.
Operating Duration (Full Charge)	10 hours at 2.0 LPM, with an inlet pressure of up to 20 inches of water at 21°C (70°F)
Operating Temperature	-20°C to 45°C (-4°F to 113°F)
Storage Temperature	-40°C to 45°C (-40°F to 113°F)
Charging Temperature	5°C to 45°C (41°F to 113°F)

SENSIDYNE®

Sensidyne manufactures, supplies, and services gas detection systems and air sampling pumps that are characterized by their ease of use, accuracy, economical cost and durability.

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