

# MILLIPORE

Environment, Health, & Safety

**MICROPRESURE<sup>®</sup>**  
**DEVICE**

MATERIAL SAFETY DATA SHEET

## SECTION 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

### Millipore Corporation

290 Concord Road  
Billerica MA 01821

Information 978-715-1335

### CHEMTREC Emergency Telephone Numbers

United States 800-424-9300

International 703-527-3887 (world wide collect)

PRODUCT: **MicropreSure Device**

Tradenames/Synonyms **MicropreSure sterilized 0.45 µm white gridded**

Product Number: **MSHAWGE48, MSHAWGS48, MSHAWGT48, MSHABGM48**

**MSDS Number: M114759**

Issue Date: September 27, 2004

Revision: November 11, 2008

Rev. Date: **A**

### SUBSTANCE IDENTIFICATION

SUBSTANCE: Filter device containing hydrophilic mixed cellulose ester (MCE) polymer membrane material in a polycarbonate housing for in-process microbiological testing.

## SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS No.	EINECS No.	Function
Mixed cellulose ester membrane (nitrocellulose (NC)/ cellulose acetate (CA))	<b>NC</b> 9004-70-0 <b>CA</b> 9004-35-7	Unlisted Unlisted	Microfiltration membrane filter.
Polycarbonate (PC) Poly(Bisphenol-A carbonate)	25971-63-5	unlisted	Filtration chamber, base and membrane support.
Polypropylene (PP)	9003-07-4	Not listed	Film
Silicone Resin	70131-67-8 and others	Not listed	Filtration chamber O-ring
Ferric oxide Silica, amorphous, fumed,	1309-37-1 112945-52-5	215-168-2 231-545-4	
Polyethylene (PE)	9002-88-4	Not listed	Luer stoppers

## SECTION 3 - HAZARD IDENTIFICATION

### EMERGENCY OVERVIEW:

<u>Appearance:</u>	White gridded, mixed cellulose ester membrane encased in a transparent polycarbonate chamber with opaque white base and colored stoppers.
<u>Major Health Hazards:</u>	Under normal operating temperature and pressure conditions, these devices do not present a health hazard.
<u>Physical Hazards:</u>	Under normal operating temperature and pressure conditions, these devices do not present a physical hazard. High temperatures, beyond the operating range, and sources of ignition may cause ignition of the membrane.

## SECTION 4 - FIRST AID

Ingestion:	These devices do not present an ingestion hazard.
Eyes:	Because of the size and solid nature of these devices they are not expected to present an eye injury hazard.
Skin:	Allergic skin reaction to the structural components of these devices has not been reported.
Inhalation:	These devices do not present an inhalation hazard because of the non-volatile nature of the polymeric component materials.

## SECTION 5 - FIRE FIGHTING MEASURES

Fire & Explosion Hazards:	The plastic components of these devices will melt and or decompose under fire conditions. Once ignited, the polymer materials, especially the mixed cellulose ester membranes, will add to the intensity of the fire, and can be expected to emit hazardous and toxic gases, vapors, fumes and smoke particles.
Extinguishing Media:	Water and ABC chemical extinguishers
Large fires:	Flood with water. Apply water from a protected location or from a safe distance.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills and Leaks:	Because of the integral nature of the devices, they do not release materials to the environment when used within recommended operating temperature and pressure conditions. Liquids being processed through these devices may be release to the surrounds should the device fail due to temperature and pressure condition outside of the recommended operating ranges. These releases should be dealt with according to the nature of the process liquids.
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## SECTION 7- HANDLING AND STORAGE

Store in a cool dry location. Keep away from sources of heat and organic solvents which may compromise the integrity of the housing.

## SECTION 8 - PERSONAL PROTECTION AND EXPOSURE CONTROL

Ventilation, Personal Protection and Respirator Use:	The ventilation, personal protection and respirator requirements will be dictated by the nature of the fluids being tested.
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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Properties	Mixed Cellulose Ester	Polycarbonate	Polypropylene	Polyethylene	Silicone Rubber
Physical State	Porous white solid	Clear or opaque wWhite solid	Transparent clear film	White solid	Orange solid
Density grams/cc (polymer powder)	Not available	1.19 - 1.22	0.9	~0.92	1.1 – 1.3
Odor	Not available	Slight aromatic	None reported	Not available	Faintly rubber-like
Odor threshold	Not available	Not available	Not available	Not available	Not available
pH	Insoluble	Insoluble	Insoluble	Insoluble	Insoluble
Water solubility:	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Melting Point (polymer pellets)	Decomposition begins at 55°C	Softens gradually over a wide temp. range	>107 °C	~120 °C	Decomposes
Boiling Point	Not available	Not available	Not available	Not available	Decomposes
Vapor Pressure	Not available	Negligible	Negligible	Negligible	Negligible
Vapor Density	Not available	Not available	Not available	Not available	Not available
Volatility	Not available	Negligible	Negligible	Negligible	Negligible
Evaporation Rate	Not available	Negligible	Negligible	Negligible	Negligible
Coefficient of water/oil distribution:	Not available	Not available	Not available	Not available	Not available

**SECTION 10 - STABILITY AND REACTIVITY**

Chemical Stability: Stable at normal temperatures and pressure.

Hazardous Polymerization Will not occur.

Incompatible with: Strong oxidizing agents, organic solvents

Hazardous Decomposition/ Combustion Products: The nature and concentration of various decomposition and combustion products that will result from heating of these polymers will vary depending upon variables such as temperature, oxygen and water vapor concentration, and the presence of other materials. The possible products, include, but are not limited to those shown below:

Polymer	Decomposition or Combustion Products
Mixed cellulose ester	Aromatic gases and oxides of carbon and nitrogen
Polycarbonate	Dense black smoke, carbon monoxide, carbon dioxide, monomer fragments and trace amounts of phenol.
Polypropylene and polyethylene	Oxides of carbon, and carbon particles
Silicone O-rings	Acetic acid, formaldehyde, silica fume.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Carcinogenicity: None of components are listed as carcinogenic by IARC, NIOSH, NTP, or OSHA

Endocrine Disrupters To the best of our knowledge, none of the components are suspected endocrine disrupters.

Exposure Limits:

INGREDIENT	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>NIOSH REL</u>	<u>European OEL</u>
All components	None listed	None listed	None listed	None listed

Toxicology Data

No toxicological data is available for this product as an entity.

Selected RTECS data for components

Reinforced Mixed Cellulose Ester Membrane	
<u>Toxicity Data</u>	
Nitrocellulose:	RTECS#: <b>QW0970000</b>
LD <sub>50</sub> , Oral, Mouse	>5 gm/kg
LD <sub>50</sub> , Oral, Rat	>5 gm/kg
Cellulose Acetate	RTECS#: <b>Not Listed</b>
LD <sub>50</sub> , Oral, Rat	>3.2 gm/kg
Data: Van Waters & Rogers	

**SECTION 12 - ECOLOGICAL INFORMATION**

Due to the inert nature of the polymeric materials in these devices, it is expected that they will have very limited biodegradability in water or soils. There is some evidence in the technical literature that nitrocellulose containing membranes will slowly decompose in contact with soils.

**SECTION 13- DISPOSAL INFORMATION**

*European Union:*

Once exhausted, your device should be considered according to the European Waste catalogue (European commission decision of 23/07/01 modifying directives 94/3/CE and 75/442/CE) as part of the following categories:

- When used to filter non-dangerous substances, **17 02 04\*, glass, plastic and wood containing or contaminated with dangerous substances**
- When used in the manufacture of pharmaceuticals **07 05 13\*, solid wastes containing dangerous substances, Wastes from the MFSU of pharmaceuticals**
- Other uses involving dangerous substances **Consult the European Waste Catalogue for specific classifications.**

*United States:*

The components of this device are not listed as USEPA RCRA hazardous wastes. However, nitrocellulose containing membranes may be regulated as hazardous waste in some jurisdictions. Waste devices should be disposed of in a manner consistent with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

The transport of these devices is not regulated by USDOT, ICAO/IATA, ADR or IMO as a hazardous material under 49 CFR 172.102(c)(1) special provision 43 or as dangerous goods by air under IATA Regulations, 4.4 special provision A122. However, once used, these devices may contain residual materials that are regulated materials. The user should determine the applicability of current regulation prior to shipping used devices.

**SECTION 15 - REGULATORY INFORMATION**

<i>California:</i> No significant Risk Level: None of the chemicals in this product are listed.	
<i>Canada:</i> As a manufactured article, formed to a specific shape, that will not expose people to a controlled product under normal conditions of use, this product is exempt from classification under WHMIS regulations.	
<i>European Union:</i> European Labeling in Accordance with EC Directives:	
Hazard Symbols:	None Applicable
Risk Phrases:	None Applicable
Safety Phrases:	None Applicable
<i>Japan:</i> None of the components of this product are listed by the Poisonous and Deleterious Substance Act.	
<i>United Kingdom:</i> Control of Substances Hazardous to Health Regulations 2002 (COSHH) Rating: L (low)	
<i>United States:</i> All of the components chemicals in this product are listed on the Toxic Substances Control Act (TSCA) Chemical Inventory or covered by the polymer exemption.	

**SECTION 16- ADDITIONAL INFORMATION**

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