
	<b>MATERIAL SAFETY DATA SHEET</b> <b>- MSDS -</b> <b>POLYCARBONATE (PC)</b> <b>TRACK-ETCHED MEMBRANE</b>	MSDS001	
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**SECTION 1 : COMPANY INFORMATION**

MANUFACTURER / DISTRIBUTOR

**it4ip SA**                    **ion track technology for innovative products**  
Address:                    avenue Jean-Etienne Lenoir, 1 – 1348 Louvain-la-Neuve - Belgium  
Tel:                            +32 (0)10 226114  
Mail:                            contact@it4ip.be

MSDS MANAGER

Manager:                    Quality Manager

**SECTION 2 : COMPOSITION / INFORMATION ON INGREDIENTS**

Trade name:                ipPORE™ Track Etched Membrane  
Generic name:              Polycarbonate (PC) Track Etched Membrane  
Other trade name: ipBLACK™ Track Etched Membrane  
                                  ipCELL CULTURE™ Track Etched Membrane  
                                  ipCLEAR™ Track Etched Membrane  
Chemical name:            Polycarbonate de bisphenol-A  
Chemical formula:  $\text{-(C}_{16}\text{H}_{14}\text{O}_3\text{)-}_n$   
CAS N°:                      25037-45-0  
% weigth                    > 99 %  
                                  Other < 1%; not known to contain toxic chemicals  
EINECS                        unlisted

**SECTION 3 : HAZARD IDENTIFICATION / EMERGENCY OVERVIEW**

APPEARANCE

Translucent (white or black) or transparent solid porous film.

CLASSIFICATION

This product is not classified as dangerous according to directive 1999/45/EC.

ADVERSE HUMAN HEALTH EFFECTS


Repeated or prolonged skin contact may cause slight skin irritation.

TARGET ORGANS

None determined.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None found.

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<b>SECTION 4 : FIRST AID MEASURES</b>
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**CONTACT WITH EYES**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice; have the victim remove contact lenses if he is wearing them and continue rinsing.

Eye injury could result from physical impact; get medical attention immediately.

**INGESTION**

This material is not expected to present an ingestion hazard in the form and quantities present in a workplace setting. However, if ingestion occurs, induce vomit and seek medical advice.

**INHALATION**

This product is not considered to represent an inhalation hazard.

Move the victim to the fresh air when inhales the gas decomposed from molten polymer or burning; medical check if still feels bad.

**SKIN CONTACT**

Repeated or prolonged contact may cause dry or irritated skin.

Cool down affected area immediately with plenty of water if contact the molten polymer; do not remove the resin if sticking to the skin and seek medical advice.

<b>SECTION 5 : FIRE FIGHTING MEASURES</b>
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Polycarbonate Track Etched Membrane can be combusted by remaining in contact with flame.

During processing, film may pick up a strong static charge; avoid discharge into dust or solvent laden air as a flash fire or explosion may result.

**SUITABLE EXTINGUISHING MEDIA**

Water-spray, water-fog, water-stream, CO2, dry-chemical, foam, earth or sand, and remove from source of flame.

No unsuitable extinguishing media found.

**SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES**


During a fire, irritating and highly toxic gases and fumes (carbon dioxide, carbon monoxide, organic acids, aldehydes, alcohols) may be generated by thermal decomposition and combustion.

**SPECIFIC FIRE-FIGHTING MEASURES**

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

**SPECIFIC FIRE-FIGHTING MEASURES**

Evacuate non-essential personnel to safe area.

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**SECTION 6 : ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS**

Wear proper protective equipment.

**SMALL AND LARGE SPILLS**

Collect material into suitable, covered container for disposal; unused membranes may be disposed as ordinary trash.

**ADVERSE ENVIRONMENTAL AND PHYSIOCHEMICAL EFFECTS**

The polymeric components of this product are not expected to biodegrade significantly in contact with soils or natural waters.

**CLEAN UP MEASURES**

The consolidated nature of the product allows spilled product to be manually collected and placed in a container for proper disposal.

**SECTION 7 : HANDLING AND STORAGE**

**HANDLING**

Avoid rough handling or dropping to maintain product integrity and cleanliness.  
 Take precautionary measures against static discharges.

**STORAGE**

Store in dark and dry location at temperature from 5°C (41°F) to 35°C (95°F).  
 Keep away from sources of ignition – no smoking.  
 No specific container is designated.

**SECTION 8 : EXPOSURE CONTROL AND PERSONAL PROTECTION**

**ENGINEERING MEASURES**

Use static eliminator against static charge


**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory protection:** No specific breathing apparatus is typically needed; nature of fluids process may nevertheless dictate the use of respiratory protection.

**Ventilation:** General ventilation is adequate for most applications.  
 Process involving material heating may require exhaust ventilation to keep the concentration of decomposition products below applicable exposure limits.

**Eye protection:** Safety glasses with side shields are adequate for normal use of this product.

**Skin protection:** Wear appropriate protective gloves to prevent skin exposure.

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<b>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES</b>
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Appearance: solid film (porous)  
Color: translucent (white or black) or transparent  
Odor: Odorless  
Melting point: 220°C (428°F)  
Flash point: 226°C (440°F)  
Ignition temperature: 580°C (1070°F) - estimation  
Explosion: none  
Vapor pressure: none  
Density: 1.2 g/cm<sup>3</sup>  
Solubility: insoluble in water

<b>SECTION 10 : STABILITY AND REACTIVITY</b>
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**STABILITY AND REACTIVITY**

This product is considered as a stable material under normal storage and handling conditions.

**INCOMPATIBILITY**

Hydrolyzed with bases.

**DECOMPOSITION PRODUCTS**

Not applicable at normal storage conditions.  
Toxic gases and fumes (carbon dioxide, carbon monoxide, organic acids, aldehydes, alcohols) may be generated by thermal decomposition.


**CONDITIONS TO AVOID**

Elevated temperatures (>225 °C) release flammable vapors.

<b>SECTION 11 : TOXICOLOGICAL INFORMATION</b>
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Inhalation: this product does not pose an inhalation health hazard.  
Ingestion: this product does not pose an ingestion health hazard (acute oral estimated to be > 5.0g/kg)  
Skin contact: this product does not pose a skin health hazard.  
Eye contact: this product does not pose an eye injury hazard.  
Carcinogenicity: none.  
Chronic toxicity: no adverse health effects are expected from prolonged or repeated exposure to this product.  
Toxicology data: Bisphenol-A polycarbonate or Poly(oxycarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenylene) Bisphenol-A polycarbonate RTECS# TR1580150  
LD50, oral, rat >10 gm/kg - LD50, oral, mouse >10 gm/kg

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**SECTION 12 : ECOLOGICAL INFORMATION**

Biotransportability: none  
Biodegradability: this product persists in the soil.  
Bioaccumulation: none  
Ecological and fish toxicity: none; toxicity is expected to be low based on insolubility in water.

**SECTION 13 : DISPOSAL INFORMATION**

To follow local regulations regarding disposal.  
European Union: Once exhausted, this membrane filter should be considered according to the European Waste catalogue (European commission decision of 03/05/01 modifying directives 94/3/CE and 75/442/CE) as part of the following categories : when used to filter non-dangerous substances : 20 01 39, separately collected fractions, plastics; other uses involving dangerous substances : consult the European Waste Catalogue for specific classifications.  
United States : PC is not a US Environmental Protection Agency RCRA Hazardous Waste. Transport and dispose of waste membrane in accordance with all federal, state and local regulations.

**SECTION 14 : TRANSPORTATION INFORMATION**

Transportation must be in accordance with applicable federal, state, provincial and local regulations.  
Specific safety measures and conditions on transport: keep at dry place to prevent from carton box crushes by wetting; do not give a shock.

**SECTION 15 : LOCAL REGULATIONS**

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.  
(United States toxic substances control act (TSCA): in accordance with TSCA inventory requirements for commercial purposes).

**SECTION 16 : ADDITIONAL INFORMATION**

Abbreviations used :  
ALD Approximate Lethal Dose  
LD50 Lethal Dose 50% is the dose of a chemical which kills 50% of a sample population.  
RCRA Resource Conservation and Recovery Act  
TSCA Toxic Substances Control Act

This safety data sheet has been prepared to comply with the requirements of European Union Directive 2001/58/EC and ANSI Z400.1-1998.

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