



Material Safety Data Sheet

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SECTION 1 PRODUCT AND COMPANY INFORMATION

Trade Name: Adenovirus and Lentivirus Purification and Concentration Kit
Catalogue Number(s): Adenovirus Three Pack Kit, Catalog # FTAV00003 / Lentivirus Three Pack Kit, Catalog # FTLV00003
Chemical Name: Surface-modified Ultra-high Molecular Weight Polyethylene
Other trade names and synonyms: Fast-Trap® Virus
Manufacturer/Distributor: Millipore Corporation (Corporate Headquarters) Millipore S.A.S. (European Headquarters)
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SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

Component	EINECS or ELINCS No.	CAS No.	Content (weight percent)	Symbol letters*	R Phrases**
Ultra-high molecular weight polyethylene	Unlisted	9002-88-4	>50	None	None
Proprietary surface modification composition	N/A	N/A	<50	None	None

* Symbol letters and categories of danger: **T+** = Very toxic, **T** = Toxic, **C** = Corrosive, **Xn** = Harmful, **Xi** = Irritant, **E** = Explosive, **F+** = Extremely flammable, **F** = Very flammable, **N** = Dangerous for the environment, **O** = Oxidising.

** The full text of each phrase is listed in Section 16.

SECTION 3 HAZARD IDENTIFICATION / EMERGENCY OVERVIEW

Appearance: White porous solid.
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.
Contact with Eyes:	Although unlikely to occur, eye contact may cause irritation.
Ingestion:	Although unlikely to occur, ingestion may cause digestive tract irritation.
Inhalation (Short Term):	This product is not considered to represent an inhalation hazard.
Inhalation (Long Term):	This product is not considered to represent an inhalation hazard.
Skin Contact:	Repeated or prolonged contact may cause dry or irritated skin
Target Organs:	None determined.
Medical conditions aggravated by exposure:	None Found.
Adverse environmental effects:	The polymeric components of this product are not expected to biodegrade significantly in contact with soils or natural waters
Adverse physiochemical effects:	The polymeric components of this product are not expected to biodegrade significantly in contact with soils or natural waters

SECTION 4 FIRST AID MEASURES

Contact with Eyes:	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, seek medical attention
Inhalation:	Inhalation is not considered a likely route of exposure.
Skin Contact:	Wash exposed skin thoroughly with soap or mild detergent and water. If irritation persists or develops, seek medical attention

SECTION 5 FIRE FIGHTING MEASURES

Flash Ignition Temperature:	352°C
Autoignition Temperature (ASR D1929):	362°C estimated
Suitable extinguishing media:	Water-spray, water-fog, water-stream, CO2, dry-chemical, foam, earth or sand, and remove from source of flame.
Unsuitable extinguishing media:	None found.
Special protective equipment for firefighters:	As in any fire, wear a self-contained breathing apparatus in pressure-demand mode and full protective gear. During a fire, irritating and highly toxic gases and fumes may be generated by thermal decomposition and combustion.
Special exposure hazards:	Under fire conditions, toxic carbon and nitrogen containing compounds will be emitted.

SECTION 6 ACCIDENTAL RELEASE

- Personal precautions:** Personal precautions will be determined by the nature of the fluids being processed, if other than water.
- Small spills:** Collect material into suitable, covered container for disposal. Unused membranes may be disposed as ordinary trash.
- Large spills:** Collect material into suitable, covered container for disposal. Unused membranes may be disposed as ordinary trash.
- Environmental precautions:** The materials of construction do not pose an environmental hazard.
- 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:** Handle with care to maintain the integrity and cleanliness of the filter unit
- Storage:** Store membranes in cool, dry location, away from excess moisture.

SECTION 8 EXPOSURE CONTROL AND PERSONAL PROTECTION

	Normal Handling Conditions	Emergency Response Conditions
Respiratory protection:	Typically, respirator use is not required. The nature of the fluids being processed may dictate the use of respiratory protection.	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Ventilation:	Membrane is a non-volatile solid and general ventilation is adequate. Processing which heats the material may require exhaust ventilation to keep the concentration of decomposition products below applicable exposure limits.	General ventilation is adequate for most applications.
Eye protection:	Safety glasses with side shields are adequate for normal use of this product	Safety glasses with side shields are adequate for normal use of this product
Skin protection:	Wear appropriate protective gloves to prevent skin exposure.	Wear appropriate protective gloves to prevent skin exposure.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White porous solid
Odor:	Faint ammonia odor
Odor Threshold:	Not available
pH:	Not applicable
Melting Point:	125-135 °C
Boiling Point:	Not available
Flash Ignition Point:	352°C
Explosive Properties:	None
Oxidizing Properties:	None
Vapor pressure, 20 °C:	Not available
Solubility:	Insoluble
Specific Gravity (Water = 1.0):	0.92-1.00
Vapor Density, 20 °C:	Not available
Viscosity, centipoise:	Not applicable
Partition coefficient (n-octanol/water):	Not applicable

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability:	Stable at normal temperatures and pressure.
Incompatible With:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon monoxide, Ammonia, Irritating and toxic fumes and gases, carbon dioxide
Conditions to Avoid:	Elevated temperatures (>150°C) release irritating and toxic vapors
Hazardous Polymerization:	Has not been reported

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation:	This product does not pose an inhalation health hazard.
Ingestion:	This product does not pose an ingestion health hazard.
Skin Contact:	This product does not pose a skin health hazard.
Eye Contact:	This product does not pose an eye injury hazard.
Carcinogenicity:	Polyethylene polymers are not listed as carcinogenic by IARC, NIOSH, NTP, or OSHA
Chronic Toxicity:	No adverse health effects are expected from prolonged or repeated exposure to this product.

Toxicology Data: Toxicological information for this product as a whole does not exist,

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: Ultra-high Molecular Weight Polyethylene membranes are not expected to readily degrade in contact with water or the soil

Environmental Fate: No information found

SECTION 13 DISPOSAL INFORMATION

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: Ultra-high Molecular Weight Polyethylene 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

Ultra-high Molecular Weight Polyethylene is not currently regulated as a hazardous material or dangerous goods by USDOT, ICAO/IATA, ADR or IMO regulations.

SECTION 15 REGULATORY INFORMATION

Australia	Hazchem Code:	Not available
	Poisons Schedule Number:	Not available
California	No Significant Risk Level:	No Significant Risk Level: None of the chemicals in this product are listed
Canada	WHMIS:	This product has a WHMIS classification of Not Controlled.
European Union	Symbols:	None
	Category of danger:	Not available
	Risk phrases:	None
	Safety phrases:	None
	OECD/High Production Volume (HPV) chemicals:	Not available
	WEEE:	Not Applicable
	RoHS:	Not Applicable

Japan	Poisonous and Deleterious Substances Control Law:	Not available
United Kingdom	Control of Substances Hazardous to Health Regulations 2002 (COSHH) Rating:	Not available
United States	Toxic Substances Control Act (TSCA):	Some chemicals used in the manufacture are not listed on the TSCA inventory and so the use of the product is restricted to R&D and FDA-regulated activities in the US.

SECTION 16 ADDITIONAL INFORMATION

Abbreviations Used		
ACGIH	American Conference of Government Industrial Hygienists	
ADR	European agreement on the international carriage of dangerous goods on road	
CAS	Chemical Abstract Service	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
EPA	United States Environmental Protection Agency	
IARC	International Agency for Research in Cancer.	
IATA	International Air Transport Association	
ICAO	International Civil Aviation Organization	
IMDG	Regulations regarding the transportation of dangerous goods on ocean-going vessels issued by the International Maritime Organization.	
LC ₅₀	Lethal Concentration 50% is the concentration of a chemical which kills 50% of a sample population	
LD ₅₀	Lethal Dose 50% is the dose of a chemical which kills 50% of a sample population.	
LDLo	Lowest observed lethal dose	
MSFU	Manufacture, Formulation, Supply and Use (Section 13)	
NIOSH	National Institute of Occupational Safety and Health (US)	
NTP	National Toxicology Program (US)	
OSHA	United States Occupational Safety and Health Administration	
RID	International regulations concerning the international carriage of dangerous goods by rail.	
RTECS	Registry of Toxic Effects of Chemical Substances (US)	
WHMIS	Workplace Hazardous Materials Information System (Canada)	

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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