

PRODUCT SAFETY DATA INFORMATION

Date: 24 November 2020
Data Sheet Number: GPS-00188

SECTION 1 – Product Identification

This 'Product Safety Data Information' Sheet covers MicroFunnel™ Plus and MicroFunnel AP with GN-6 Metrice[®] and Versapor[®] RC membranes

Example Product name(s): MicroFunnel™ Plus Filter Funnel with GN-6 Membrane, 100 mL, 0.45 µm, White, Gridded, Sterile, Individually Bagged

Example Part Number(s): See Appendix 1

The filters detailed above are intended for use in laboratory applications.

Specific information regarding GN-6 Metrice membrane can be found at the following links:

[https://www.pall.com/content/dam/pall/laboratory/literature-library/non-gated/sds/Membranes%20Cellulose%20Nitrate%20and%20Esters%20of%20Cellulose\(HazCom\)\(JIS\).pdf](https://www.pall.com/content/dam/pall/laboratory/literature-library/non-gated/sds/Membranes%20Cellulose%20Nitrate%20and%20Esters%20of%20Cellulose(HazCom)(JIS).pdf)

[https://www.pall.com/content/dam/pall/laboratory/literature-library/non-gated/sds/Membranes%20Cellulose%20Nitrate%20and%20Esters%20of%20Cellulose%20\(REACH\).pdf](https://www.pall.com/content/dam/pall/laboratory/literature-library/non-gated/sds/Membranes%20Cellulose%20Nitrate%20and%20Esters%20of%20Cellulose%20(REACH).pdf)

Specific information regarding Versapor RC membrane can be found at the following link:

<https://www.pall.com/content/dam/pall/pall-corp/literature-library/non-gated/msds/PSDS%20Versapor%20RC%20membranes.pdf>

For further information on Pall products, please visit Pall at <https://www.pall.com/en/about-pall.html>

SECTION 2 - Hazards Identification

Product definition: Article.

These products are classified as hazardous according to REACH Regulation 1907/2006, or European CLP/GHS Regulation 1272/2008.

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) related to the material as supplied.

GHS Signal word: Danger

Hazard statements: H228 – Flammable solid



Special packaging requirements: Not applicable

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SECTION 3 - Materials of Construction

3.1 The filters detailed in Section 1 are comprised of the following materials:

Material Name	CAS Number	Percentage Composition
Cellulose nitrate and esters of cellulose		< 1
Acrylic copolymer membrane	Pall proprietary	< 1
Non-woven nylon 6,6 support material	32131-17-2	< 1
Hydrophobic 'RC' surface treatment	Pall proprietary	< 1
Cellulose	9004-34-6	2 – 2.6
Polyethylene	9002-88-4	2 – 21.8
Polypropylene	9003-07-0	25.5 – 43.3

These products not known to contain BADGE, NOGE, or BFDGE.

Trace additives will be present in the plastic components- for example antioxidants are present for stabilisation purposes.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the article.

Please note that in May 2019 the Stockholm Convention moved to add perfluorooctanoic acid (PFOA) and/or PFOA-related compounds to its POPs Annex A with the intention of restricting the use of PFOA and its related compounds to a limited range of applications within the ratifying countries.

These products are not known to contain perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds at levels in excess of:

PFOA and its salts	25 ppb
PFOA related compounds	1000 ppb

The above statement is based on a risk assessment approach considering: the supplier's information on the key constituent in the 'RC' surface treatment concerning to PFOA, and Pall testing of the finished membrane for residual PFOA. Pall testing of the key constituent in the 'RC' surface treatment for PFOA related compounds was conducted.

For further information on suitability for your intended use of these membranes please contact your Pall representative.

There are no other SVHC substances known to be present in the finished articles above 0.1%.

There are no current ROHS2 Directive (2011/65/EU) and amendment (2015/863) substances of concern (including Lead, Cadmium, Mercury, Hexavalent Chromium, Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Benzyl Butyl Phthalate (BBP), Dibutyl phthalate

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(DBP) and Diisobutyl phthalate (DIBP)) known to be present in the materials employed in excess of the limits laid down, based on information from our suppliers and knowledge of substances used within Pall the manufacturing facility.

Pall filters do not employ natural rubber latex, or latex derivatives in their construction.

These products (see appendix 1) do contain animal materials (i.e. animal parts, tissues, or body fluids). However, to assist our customers in performing a TSE/BSE risk assessment, we are pleased to provide the following information:

Pall filters for healthcare and laboratory applications may utilise components which are fabricated from plastic resins containing animal-derived additives at trace levels such as tallow-derived substances. Please be advised that tallow-derived additives are not considered specified BSE risk materials according to the current revision of the U.S. Code of Federal Regulations, Title 21 of part 189.5. Furthermore, the CPMP's *Note for guidance on minimising the risk of transmitting animal spongiform encephalopathies via human and veterinary medicinal products* (EMA410/01 rev 3) gives specific consideration to tallow derivatives and state they are unlikely to be infectious due to the rigorous processing steps used during their manufacture (an example of which is transesterification, or hydrolysis, at not less than 200°C under pressure for not less than 20 minutes).



This product can expose you to PFOA which are known in the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

These products placed on the market in the State of California by Pall are not intended for 'consumer' sale, but, are for professional or industrial use. Therefore, the only anticipated exposure to these items would be through 'occupational exposure' which does not require mandatory labelling of all articles. In line with the 'Questions and Answers for business' (dated August 2017) on the labelling requirements – Q41 - this SDS convey this warning for occupational exposure.

SECTION 4 - First Aid Measures

4.1 First aid measures

Always address any contaminants present on the filter as the result of use.

Eye Contact:	Eye injury could result from physical impact. Get medical attention immediately.
Inhalation:	Inhalation is not considered a likely route of exposure for the filter product as supplied by Pall.
Skin Contact:	Wash with soap and water. If irritation persists, get medical attention.
Ingestion:	This material is not intended for ingestion and is not expected to present an ingestion hazard in the form and quantities present in a work place setting. However, if ingestion occurs, seek medical attention.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

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4.2 Key symptoms and effects

No known significant effects or critical hazards related to the materials of construction of the filter as supplied.

SECTION 5 - Fire Fighting Measures

5.1 Extinguishing media

Select an extinguish medium suitable for surrounding / working environment.

Use dry chemical, CO₂, water spray (fog) or foam.

5.2 Specific Hazards

Hazards from the products: Flammable solid

Hazardous thermal decomposition products: CO, CO₂, Acrid Smoke, NO_x

Note: These products may contain levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) – which should be taken into account on thermal decomposition of the product.

5.3 Advice to Fire Fighters

Special precaution required. Fire-fighters should wear appropriate protective equipment, including self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

SECTION 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) related to the material as supplied.

No special measures are required in respect of the filters in the unused condition as supplied.

For used filters always address any contaminants present on the filter as the result of use.

6.2 Environmental precautions

For unused filter modules, place in designated waste container appropriate to the materials of construction listed in Section 3 and dispose of in accordance with local regulations via a licenced waste disposal contractor.

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For used filter modules, using clear-up, containment and appropriate PPE measures related to the product being filtered and the materials of construction detailed in Section 3.

6.3 Spillage containment and cleaning up

Use suitable equipment to collect the filter material and place in a designated, labelled waste container.

Care should be taken to consider the nature of any contamination on the filter as the result of use and suitable PPE employed for handling waste.

Dispose of waste via a licensed waste disposal contractor.

SECTION 7 – Handling and Storage

7.1 Handling

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) related to the material as supplied.

Put on appropriate personal protective equipment for the working environment (See Section 8). Consult details of product being filtered for specific advice. Avoid activities that can damage the filter.

Follow good hygiene practices. Eating, drinking and smoking are generally prohibited in areas where this product is handled, stored or processed – exceptions are made on the guidance of local medical advice. Staff must follow standard work-place hygiene before eating, drinking or smoking after using this product. Wear gloves to prevent contamination of the filter cartridge and maintain cleanliness of the unused filter.

7.2 Storage

In the received condition, suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) in the material as supplied.

Gloves are also recommended to prevent contamination of the filter cartridge and maintain cleanliness. Handling of used filters must take into account the nature of the process fluids used and potential contaminant. The article is supplied dry, without the presence of any preserving fluid.

Store in a cool, clean environment.

Handle with care to avoid damage or abrading.

Store at temperatures between 15 °C and 30 °C (59-86 °F), in dry conditions. For conditions outside of these limits consult Pall for specific recommendations.

Do not expose to direct sunlight or other radiation or direct weather conditions.

Store in original shipping bag or boxing.

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Ensure careful handling to avoid physical damage. Ensure shipping bag and seals are intact prior to use. Plastics can be damaged if roughly handled – particularly at sub-zero temperatures. Thermal shock by quickly raising the temperatures from sub-zero should be avoided.

Pall recommends a visual inspection prior to use. Do not use if the product or packaging is damaged (please contact Pall for further advice).

Please also consult the Pall instructions for use information on the product prior to use.

7.3 Shelf life

Pall recommends a customer shelf life of 5 years, from the date of manufacture, provided the product has been stored in accordance with the conditions laid out in section 7.2.

SECTION 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Occupational Exposure limits: None required

Recommended monitoring procedures: None required

8.2 Exposure controls

There are no special ventilation requirements for the article as supplied in the new and unused condition.

Hygiene Measures: No special measures required. Good hygiene practice in line with local working environmental requirements and medical guidelines.

Hand protection: Disposable gloves are recommended to ensure filter remains clean during installation.

Environmental Exposure Controls: Not normally required for the filter itself as supplied.

After the filter has been used additional exposure controls care should be taken in line with the nature of any contaminant on the filter as a result of its use.

SECTION 9 - Physical and Chemical Properties

Appearance: Disposable filter funnel

Physical state: Solid

Colour: Colourless with white membrane

Solubility: Insoluble in water

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Auto-ignition temperature:

Cellulose typically > 250 °C (480 °F)

Polyethylene typically > 330 °C (630 °F)

Polypropylene typically > 315 °C (600 °F)

Sensitive to shock:

Mechanical / thermal shock can result in damage to the filter

SECTION 10 – Stability and Reactivity

Reactivity: The filter is stable under the recommended conditions of use and storage.

Chemical Stability: The filter is stable under recommended conditions of use and storage.

Hazardous Polymerisation: Polymerisation will not occur under recommended conditions of use and storage.

Other hazardous reactions: Consult details of product being filtered for specific advice. Under normal conditions of storage and use, no hazardous reactions will occur.

Conditions to Avoid: Avoid conditions that soften, swell or adversely affect the filter or its materials of construction. Consult Pall if the filter is to be used for continuous periods at 82°C or more.

Do not allow fluids to freeze on the filter.

Incompatible Materials: Strong Acids, Strong Alkalis, Strong Oxidising Agents.

Decomposition Products: Under recommended conditions of use or storage, no hazardous decomposition products will be produced.

PRODUCT SAFETY DATA INFORMATIONDate: 24 November 2020
Data Sheet Number: GPS-00188**SECTION 11 - Toxicological Information**

The information in this section contains generic advice and guidance in respect of the unused filter as supplied. Consult SDS details of the product being filtered for specific advice and recommendations.

11.1 Acute Toxicity

Based on typical information for the material type named, this information has not been determined specifically for Pall Medical filters:

Material Name	Result	Species	Dose	Exposure
Polypropylene	LD50 Oral	Rat	> 8 g/kg	-

Irritation/Corrosion/Sensitisation: No known concern to unused filter as supplied

Mutagenicity / Carcinogenicity / Reproductive Toxicity / Teratogenicity: No known concern for the materials of construction of the filter as supplied (new and unused)

Aspiration Hazard: Not applicable for un-used filter.

Potential acute health effects: No known significant effects or critical hazards for the unused filter as supplied.

11.2 Chronic health effects

No known significant effects or critical hazards for the unused filter as supplied.

Carcinogenicity: Classified 3 (Not classifiable for humans.) by IARC [Acrylic fibers].

SECTION 12 - Ecological Information

Pall filters are not expected to degrade in contact with soil or water under ambient conditions.

Versapor RC, Pall Hydrophobic Acrylic Copolymer and Pall Hydrophobic ACP filter membranes are not expected to degrade in contact with soil or water under ambient conditions.

Please also see information on levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) in Section 3.

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SECTION 13 - Disposal Information

The information in this section contains generic advice and guidance.

Product

Methods of disposal: Disposal/handling of the used and un-used filter funnels should be in-line with national legislation and local regulatory requirements for the materials present. Unused filter funnels may be used incinerated via an approved process – however, these products may contain levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) – which should be taken into account on thermal decomposition of the product and decision on incineration

Due consideration shall be made to the nature of the contaminants on the filters as a result of use.

Hazardous Waste: To the best of our knowledge, this product if un-used is not regarded as hazardous waste as defined by the EU Directive 91/689/EEC and amendments. Due consideration must be made to the nature of the contaminants on the filters as a result of use, when considering whether the used filters are classified as hazardous waste. Used filter cartridges should be disposed of as clinical waste due to the nature of the contaminants on the filters as a result of use. Therefore, used filters may be classified as hazardous – clinical waste.

Packaging

Bagging: Plastic (polyethylene)

Box: Cardboard

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled where suitable arrangements and facilities exist. Incineration or land-fill should only be considered where re-cycling is not feasible.

SECTION 14 - Transport Information

The clean and un-used filter, supplied in its original packaging, is not classified as dangerous goods under ADR, RID, IMDG or IATA regulations.

SECTION 15 – Regulatory Information

Stockholm Convention on Persistent Organic Pollutants (POP) related to PFOA content. See section 1 above.

EU Regulation (EC) No. 1907/2006 (REACH): See section 3 above as amended by EC 2017/1000

Black List Chemicals: Not Listed

Priority List Chemicals: Not Listed

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Integrated pollution prevention and control List – Air: Not Listed

Integrated pollution prevention and control List – Water: Not Listed

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Version: Original

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above Pall Corporation, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any materials is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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APPENDIX 1 List example part numbers for which this sheet is applicable

Example part numbers for which this sheet is applicable:

4807, 4829, 4856

APPENDIX 2: SDS for GN-6 membrane

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - United Kingdom (UK)		
Date	: 30/10/2019	
Version	: 1	

SAFETY DATA SHEET

Membranes: cellulose nitrate and esters of cellulose

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	: Membranes: cellulose nitrate and esters of cellulose
EC number	: Article.
CAS number	: Not applicable.
Other means of identification	: Not available.
Product code	: GN-6 & GN-4 Metrical Membrane
Product description	: Not available.
Product type	: Solid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	: Not available.
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1.3 Details of the supplier of the safety data sheet

Supplier's details	Pall Corporation 25 Harbor Park Drive Port Washington, NY 11050 Phone no.: 516-484-5400 Toll Free: 1-800-289-7255 Fax no.: 516-484-3600 Email address: labcustomersupport@pall.com Website: https://www.pall.com/ or https://www.pall.com/en/about-pall/quality/ssdi.html	
e-mail address of person responsible for this SDS	: labcustomersupport@pall.com	

1.4 Emergency telephone number

National advisory body/Poison Centre		
Emergency telephone number (with hours of operation)	: CHEMTREC, U.S.: 1-800-424-9300 CCN16658 (24 hours/day, 7 days/week)	International: 001-703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	: Article
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]	
Flam. Sol. 1, H228	

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

This product is considered to be a manufactured article in the country for which this Safety Data Sheet is written. Only the information required by the country's enforced GHS version are shown in this SDS.

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SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H228 - Flammable solid.

Precautionary statements

Prevention : P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

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SECTION 3: Composition/information on ingredients

3.1 Substances : Article

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified. See Section 16 for the full text of the H statements declared above.	[2]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures
4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

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SECTION 4: First aid measures

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Flammable solid.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

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SECTION 7: Handling and storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters
Occupational exposure limits

Product/ingredient name	Exposure limit values
Glycerol	EH40/2005 WELs (United Kingdom (UK), 8/2018). TWA: 10 mg/m ³ 8 hours. Form: Mist

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

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SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Solid. [Membrane.]
- Colour** : White.
- Odour** : None.
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Not available.
- Evaporation rate** : Not available.

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SECTION 9: Physical and chemical properties

Flammability (solid, gas)	: Flammable solid.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Relative density	: 1.25
Solubility(ies)	: Not available.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not applicable.
Explosive properties	: Not available.
Oxidising properties	: Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Rate of deterioration increases with increasing temperature and time. Avoid exposure to heat. Use oldest material first.
10.5 Incompatible materials	: Alkalines, strong acids, ketones, amides, ethyl ether alcohol mixtures, and nitroparaffins.
10.6 Hazardous decomposition products	: The predominant products will be carbon monoxide, carbon dioxide, and nitrogen oxides. Under some conditions, methane, irritating aldehydes and carboxylic acids and hydrogen cyanide may be formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitisation

There is no data available.

Mutagenicity

There is no data available.

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SECTION 11: Toxicological information

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on likely routes of exposure : Dermal contact. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There is no data available.

12.2 Persistence and degradability

There is no data available.

12.3 Bioaccumulative potential

There is no data available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3270	UN3270	UN3270	UN3270
14.2 UN proper shipping name	Nitrocellulose membrane filters, [with not more than 12.6% nitrogen, by dry mass]	Nitrocellulose membrane filters, [with not more than 12.6% nitrogen, by dry mass]	Nitrocellulose membrane filters, [with not more than 12.6% nitrogen, by dry mass]	Nitrocellulose membrane filters, [with not more than 12.6% nitrogen, by dry mass]
14.3 Transport hazard class(es)	4.1 	4.1 	4.1 	4.1 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

Annex XVII - Restrictions : Not applicable.
 on the manufacture,
 placing on the market
 and use of certain
 dangerous substances,
 mixtures and articles

[Other EU regulations](#)

[Ozone depleting substances \(1005/2009/EU\)](#)

Not listed.

[Prior Informed Consent \(PIC\) \(649/2012/EU\)](#)

Not listed.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

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SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Sol. 1, H228	Expert judgment

Full text of abbreviated H statements

H228	Flammable solid.
------	------------------

Full text of classifications [CLP/GHS]

Flam. Sol. 1, H228	FLAMMABLE SOLIDS - Category 1
--------------------	-------------------------------

History

Date of issue (dd/mm/yyyy) : 30/10/2019
Date of previous issue : Not applicable
Version : 1
Prepared by : KMK Regulatory Services Inc.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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APPENDIX 3: PSDS for Versaor RC membrane

PRODUCT SAFETY DATA INFORMATION

Date: 11 November 2020

Data Sheet Number: PSDS2019/1/bg Revision: 1

SECTION 1 – Product Identification

This 'Product Safety Data Information' Sheet covers Pall hydrophobic, acrylic copolymer membrane cast on a non-woven nylon support.

Example Product name(s): Versapor® RC membranes
 Hydrophobic Acrylic Copolymer membranes and Hydrophobic ACP membranes

Example Part Number(s): See Appendix 1.

The membrane filters detailed above are intended for filtration and separation applications with compatible fluids – which do not soften, swell or adversely affect the filter, or its materials of construction. For use in line with Pall's instructions for use and within published recommended use conditions.

These membranes are only intended for use in applications or for inclusion in devices, which do not pose any risk of bioavailability of any residual chemicals present in the polymer membrane.

For further information on Pall products, please visit Pall at <https://www.pall.com/en/about-pall.html>

SECTION 2 – Hazards Identification

Product definition: Article.

These products are not classified as hazardous according to REACH Regulation 1907/2006, or European CLP/GHS Regulation 1272/2008.

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) related to the material as supplied.

GHS Signal word: No signal word.

Hazard statements: No known significant effects or critical hazards.

Special packaging requirements: None.

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SECTION 3 – Materials of Construction

3.1 The membrane filters detailed in Section 1 are comprised of the following materials:

Material Name	CAS Number	Percentage Composition
Acrylic copolymer membrane	Pall proprietary	10% to 50%
Non-woven nylon 6,6 support material	32131-17-2	50% to 90%
Hydrophobic 'RC' surface treatment	Pall proprietary	0.1% to 5%

Packaging Material	CAS Number
Polyethylene bagging	9002-88-4
PVC support core	9002-88-2

These products are not known to contain bisphenol-A diglycidyl ether (BADGE), Novolac glycidyl ethers (NOGE), or bisphenol-F diglycidyl ether (BFDGE).

Trace additives will be present in the plastic components- for example antioxidants are present for stabilisation purposes.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the article.

Please note that in May 2019 the Stockholm Convention moved to add perfluorooctanoic acid (PFOA) and/or PFOA-related compounds to its POPs Annex A with the intention of restricting the use of PFOA and its related compounds to a limited range of applications within the ratifying countries.

These products are not known to contain perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds at levels in excess of:

PFOA and its salts	25ppb
PFOA related compounds	1000ppb

The above statement is based on a risk assessment approach considering: the supplier's information on the key constituent in the 'RC' surface treatment concerning to PFOA, and Pall testing of the finished membrane for residual PFOA. Pall testing of the key constituent in the 'RC' surface treatment for PFOA related compounds was conducted.

For further information on suitability for your intended use of these membranes please contact your Pall representative.

There are no other current SVHC substances (including Bisphenol-A) known to be present in the finished articles above 0.1%.

There are no current RoHS2 (Directive 2011/65/EU) and amendment (2015/863) substances of concern (including Lead, Cadmium, Mercury, Hexavalent Chromium, Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Benzyl Butyl Phthalate (BBP), Dibutyl phthalate (DBP) and Di isobutyl phthalate (DIBP) present in the filter membrane material employed in excess of the established limits.



This product may expose you to PFOA which is known in the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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These products placed on the market in the State of California by Pall are not intended for 'consumer' sale, but, are for professional or industrial use. Therefore, the only anticipated exposure to these items would be through 'occupational exposure' which does not require mandatory labelling of all articles. In line with the 'Questions and Answers for business' (dated August 2017) on the labelling requirements – Q41 - this SDS convey this warning for occupational exposure.

SECTION 4 – First Aid Measures**4.1 First aid measures**

Always consult the SDS details for the product being filtered, for specific in process advice and how to address any contaminants present on the filter membrane as the result of use.

Eye Contact:	Eye injury could result from physical impact. Get medical attention immediately.
Inhalation:	Inhalation is not considered a likely route of exposure for the filter media product as supplied by Pall.
Skin Contact:	Wash with soap and water. If irritation persists, get medical attention.
Ingestion:	This material is not intended for ingestion and is not expected to present an ingestion hazard in the form and quantities present in a work place setting. If ingestion occurs, seek medical attention.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training.

4.2 Key symptoms and effects, both acute and delayed

No known significant effects or critical hazards related to the materials of construction of the filter media as supplied.

SECTION 5 – Fire Fighting Measures**5.1 Extinguishing media**

Select an extinguish medium suitable for surrounding / working environment and consult the SDS of the product being filtered for specific advice.

For filter media use dry chemical, CO₂, water spray (fog) or foam.

5.2 Specific Hazards

Consult the SDS details of product being filtered for specific advice.

For the filter media alone: No specific fire or explosion hazard. Hazardous thermal decomposition products:
CO, CO₂, Acrid Smoke

Note: These products may contain levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) – which should be taken into account on thermal decomposition of the product.

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5.3 Advice to Fire Fighters

No special precaution required related to the filter media alone. Fire-fighters should wear appropriate protective equipment, including self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) related to the material as supplied.

No special measures are required in respect of the filter media in the unused condition as supplied.

6.2 Environmental precautions

For unused filter media, place in designated waste container appropriate to the materials of construction listed in Section 3 and dispose of in accordance with local regulations via a licensed waste disposal contractor.

For used filter media, consult the SDS details of the product being filtered for specific advice on spillage, using clear-up, containment and appropriate PPE measures related to the product being filtered and the materials of construction detailed in Section 3.

6.3 Spillage containment and cleaning up

Use suitable equipment to collect the filter media and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Care should be taken to consider the nature of any contamination on the filter as the result of use and suitable PPE employed.

SECTION 7 – Handling and Storage**7.1 Handling**

Suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to residual levels of levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) related to the material as supplied.

Put on appropriate personal protective equipment for the working environment (See Section 8). Consult details of product being filtered for specific advice. Avoid activities that can damage the filter media.

Follow good industrial hygiene practice. Eating, drinking and smoking are prohibited in areas where this product is handled, stored or processed. Workers must follow standard work-place hygiene before eating, drinking or smoking after using this product. Wear gloves to prevent contamination of the filter media and maintain cleanliness.

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7.2 Storage

In the received condition, suitable gloves must be worn when handling these membranes out of their packaging, to address any concerns related to levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) in the material as supplied.

Gloves are also recommended to prevent contamination of the filter membrane and maintain cleanliness. Handling of used filters must take into account the nature of the process fluids used and potential contaminant. The article is supplied dry, without the presence of any preserving fluid.

Store in a cool, clean environment.

Handle with care to avoid damage or abrading.

Store at temperatures between 15°C and 30°C (59 – 86°F), in dry conditions. For conditions outside of these limits consult Pall for specific recommendations.

Do not expose to direct sunlight or other radiation or direct weather conditions.

Store in original shipping bag or boxing.

Ensure careful handling to avoid physical damage. Ensure shipping bag and seals are intact prior to use. Plastics can be damaged if roughly handled – particularly at sub-zero temperatures. Thermal shock by quickly raising the temperatures from sub-zero should be avoided.

Pall recommends a visual inspection prior to use. Do not use if the product or packaging is damaged (please contact Pall for further advice).

Please also consult the Pall instructions for use information on the product prior to use.

7.3 Shelf life

Pall recommends a customer shelf life of 5 years, from the date of manufacture, provided the product has been stored in accordance with the conditions laid out in section 7.2.

SECTION 8 – Exposure Controls/Personal Protection**8.1 Control parameters**

Occupational Exposure limits: None required.

Recommended monitoring procedures: None required

8.2 Exposure controls

There are no special ventilation requirements for the article as supplied in the new and unused condition.

Hygiene Measures No special measures required. Good hygiene practice in line with local working environmental requirements and industry guidelines.

Hand protection: Disposable gloves are recommended to ensure filter remains clean during installation.

Environmental Exposure Controls: Not normally required for the filter itself as supplied.

After the filter has been used, additional exposure controls care should be taken in line with the nature of any contaminant on the filter as a result of its use.

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SECTION 9 – Physical and Chemical Properties

Appearance:	Filter membrane sheet material
Physical state:	Solid
Colour:	White.
Melting Point/ freezing point:	Typically 230°C for acrylic fibres Typically 215°C (for nylon polymers)
Flash Point:	Not applicable
Solubility:	Insoluble in water.
Auto-ignition temperature:	Not applicable
Sensitive to shock:	Mechanical / thermal shock can result if damage to the filter

SECTION 10 – Stability and Reactivity

Reactivity:	The filter is stable under the recommended conditions of use and storage.
Chemical Stability:	The filter is stable under the recommended conditions of use and storage.
Hazardous Polymerisation:	Polymerisation will not occur.
Other hazardous reactions:	Consult details of product being filtered for specific advice. Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to Avoid:	Avoid conditions that soften, swell or adversely affect the filter or its materials of construction. Consult Pall if the filter is to be used for continuous periods at 82°C or more. Do not allow fluids to freeze on the filter.
Incompatible Materials:	Strong Acids, Strong Alkalis, Strong Oxidising Agents.
Decomposition Products:	Under recommended conditions of use or storage, no hazardous decomposition products will be produced.

SECTION 11 – Toxicological Information

The information in this section contains generic advice and guidance in respect of the unused filter as supplied. Consult SDS details of the product being filtered for specific advice and recommendations.

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11.1 Acute Toxicity

Irritation/Corrosion/Sensitisation: No known concern

Mutagenicity / Carcinogenicity / Reproductive Toxicity / Teratogenicity: No known concern

Aspiration Hazard: Not applicable for un-used filter.

Potential acute health effects: No known significant effects or critical hazards for the unused filter as supplied.

11.2 Chronic health effects

No known significant effects or critical hazards for the unused filter as supplied.

Carcinogenicity: Classified 3 (Not classifiable for humans.) by IARC [Acrylic fibers].

SECTION 12 – Ecological Information

The information in this section contains generic advice and guidance related to hydrophobic acrylic and nylon materials.

Versapor RC, Pall Hydrophobic Acrylic Copolymer and Pall Hydrophobic ACP filter membranes are not expected to degrade in contact with soil or water under ambient conditions.

Please also see information on levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000ppb) in Section 3.

SECTION 13 – Disposal Information

The information in this section contains generic advice and guidance.

Product

Methods of disposal: Disposal/handling of the used and un-used membranes should be in-line with national legislation and local regulatory requirements for the materials present. Unused membranes may be used incinerated via an approved process – however, these products may contain levels of PFOA (less than 25 ppb) and PFOA-related compounds (less than 1000 ppb) – which should be taken into account on thermal decomposition of the product and decision on incineration.

Due consideration shall be made to the nature of the contaminants on the filters as a result of use.

Hazardous Waste: To the best of our knowledge, this product if un-used is not regarded as hazardous waste as defined by the EU Directive 91/689/EEC and amendments. Due consideration must be made to the nature of the contaminants on the filters as a result of use, when considering whether the used filters are classified as hazardous waste.

Packaging

Bagging: Plastic (polyethylene)

Core: PVC

Box: Cardboard

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The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled where suitable arrangements and facilities exist. Incineration or land-fill should only be considered where re-cycling is not feasible.

SECTION 14 – Transport Information

The clean and un-used filter, supplied in its original packaging, is not classified as dangerous goods under ADR, RID, IMDG or IATA regulations.

SECTION 15 – Regulatory Information

Stockholm Convention on Persistent Organic Pollutants (POP) related to PFOA content. See section 1 above.

EU Regulation (EC) No. 1907/2006 (REACH): See section 3 above as amended by EC 2017/1000

Black List Chemicals: Not Listed

Priority List Chemicals: Not Listed

Integrated pollution prevention and control List – Air: Not Listed

Integrated pollution prevention and control List – Water: Not Listed

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Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above Pall Corporation, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any materials is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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APPENDIX 1

Example part number:

Product: Versapor RC membrane

Part Number: VRC%#####

Where:

(%%) indicates filter series (200RC, 450RC, 800RC, 1200RC, 3000RC, 5000RC) and rating (μm)

(#####) indicates unique filter size

Country of Origin: Made in the U.S.A.

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