

SECTION 1 – Product Identification

This 'Product Safety Data Information' Sheet covers resin-bonded, hydrophobic glass fibre filter media on a cellulosic substrate supplied by Pall Corporation.

Example Product name(s): Pallflex® 40 and Pallflex Glass Fiber EO1340-LP filter media

Example Part Number(s): See Appendix 1.

The filter materials 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. This material is intended for filtration purposes in professional and industrial applications, in line with Pall's instructions for use and technical information.

The filter media detailed above are not medical devices as supplied. Please note the glass fibres employed in this material are fully bonded within a resin matrix and therefore the material is not considered hazardous as supplied. However, it should be noted that, if during destruction of the filter as part of disposal the structural bonding of the glass fibre media is destroyed, then suitable protective measures need to be taken as any resulting loose, air borne glass fibres are considered possible carcinogens by inhalation.

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 maintain the cleanliness of the articles.

GHS Signal word: No signal word.

Hazard statements: No known significant effects or critical hazards.

Special packaging requirements: None.

Other hazards: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur on exposure to released fibres or dust. Care should be taken to avoid direct contact or damage to the filter media which would result in free fibre release.

Please note: persistent glass microfibers used in the manufacture of this product are considered H351 suspected of causing cancer.

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
Persistent Glass microfiber	-	30-40%
Resin binders	-	10-20%
Cellulosic substrate – cellulosic fibres with regenerated cellulosic binder	-	40-50%

Packaging Material	CAS Number
Polyethylene bagging	9002-88-4
Kraft cardboard core	-

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

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

In relation to the candidate list of substances listed for 'Authorization', and those substances on the 'Authorized' lists currently issued by ECHA (herein referred to as SVHCs), and based on current knowledge of the materials of construction of Pall products, we can state we do not anticipate any of the SVHCs (including Bisphenol-A) to be present at a concentration of greater than 0.1% (w/w) in these filter media.

There are no current RoHS2 (Directive 2011/65/EU) and RoHS3 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) known present in the filter media in excess of the established limits.

These Pall filter media products do not employ natural rubber latex, or latex derivatives in their construction.

These products (see appendix 1) are not known to contain animal materials (i.e. animal parts, tissues, or body fluids).

Note: 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 media grade 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. Consult details of the product being filtered for specific advice. In the Pall Corporation provides the information contained herein in good faith and states that it represents the best information currently available. However, no warranties or representations are expressed or implied and Pall Corporation assumes no liabilities resulting from its use. Users should make their own investigations to determine the suitability of the information for their applications. In no way shall Pall Corporation be responsible for losses or damages resulting from the use or reliance on this information.

event of damage to the material, cutting or use, or any other event in which glass fibres could be released and inhaled move to fresh air and seek medical advice if symptoms persist.

- Skin Contact:** Unlikely route for exposure as gloves should be worn whenever handling this material to prevent its contamination before use and avoid skin contact with the material. Wash with soap and water. If irritation occurs 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.

Inhalation:

None identified under normal conditions of use or storage. If activities that create dust are conducted, inhalation of dusts can cause nose, throat and upper respiratory tract irritation. Symptoms include coughing, sneezing and throat irritation. Released (free) glass fibres are considered a potential carcinogen and possible processes which may result in the generation of dusts must be avoided.

Skin irritation:

Skin irritation is possible – gloves should be worn when handling this material.

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.

Warning: Combustion can result in the release of free glass fibres - hazardous to humans and the environment. Suitable PPE and breathing apparatus precautions should be taken related to this risk in the event of fire or other conditions resulting in the release of dust / free fibres.

Hazardous thermal decomposition products: CO, CO₂, Acrid Smoke, SO_x.

Irritation to eyes - Consult details of the product being filtered for specific advice.

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.

PPE must be worn when handling debris after a fire, due to glass fibre release.

SECTION 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear gloves when handling material in the unused condition as supplied.

In the event of potential fibre release, please use appropriate PPE to avoid breathing dust / free fibers.

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

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 licenced 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 filters 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 for handling waste.

SECTION 7 – Handling and Storage

7.1 Handling

WARNING: Avoid activities that can damage the filter material and create dust.

Suitable gloves are recommended to maintain the cleanliness of these articles.

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 generally 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 of the unused filter material and avoid irritation in the event of direct skin contact with the material.

7.2 Storage

In the received condition, special protective equipment is not needed during handling and normal use of this filter material.

Gloves are recommended to avoid skin contact and also to prevent contamination of the filter material and maintain cleanliness. Handling of used filter materials must take into account the nature of the process fluids used and potential contaminants. The article is supplied dry, without the presence of any preserving fluid.

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Store in a cool, clean environment.

Store at temperatures between 5°C and 30°C (41°F – 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 or abrading. Ensure shipping bag and seals are intact prior to use. 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: There are no applicable exposure limit requirements or guidelines. General ventilation should be sufficient for most operations.

Recommended monitoring procedures: None required for the filter material as supplied.

8.2 Exposure controls

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

Hygiene Measures: Wear gloves. 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 and avoid skin contact.

Environmental Exposure Controls: Not normally required for the filter itself as supplied. Avoid generation of dust.

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:	Filter membrane sheet material
Physical state:	Solid
Colour:	White/Cream
Solubility:	Filter material is not readily soluble in water.
Auto-ignition temperature:	<Resin components: Non-flammable> <Cellulosic material: 451°F>
Sensitive to shock:	Mechanical / thermal shock can result if damage to the filter material

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. Do not allow fluids to freeze on the filter.
Incompatible Materials:	Strong Acids, Strong Alkalis, Alcohols, 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.

11.1 Acute Toxicity

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

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). Care must be taken to avoid the generation of free glass fibres which are considered a potential carcinogen.

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Aspiration Hazard:	Not applicable for un-used filter. Care must be taken to avoid the generation of free glass fibres.
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:	No specific test data available, no evidence for hazardous properties for the filtration medium as supplied. Care must be taken to avoid the generation of free glass fibres which are considered a potential carcinogen.
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SECTION 12 – Ecological Information

No data available.

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 materials should be in-line with national legislation and local regulatory requirements for the materials of construction and substances present as the result of use.

Used filter material should be disposed in line with the nature of the contaminants on the filter material as a result of use. Therefore, used filter material may be classified as hazardous – clinical waste.

It should be noted that if during destruction of the filter as part of disposal the structural bonding of the glass fibre media is destroyed, then suitable protective measures need to be taken as any resulting loose, air borne glass fibres are considered possible carcinogens by inhalation.

Due consideration must also be made to the nature of contaminants on the filters as the result of use.

Warning: Do NOT incinerate unused filters with general waste, as glass fibres can be released and be hazardous to humans and the environment.

Hazardous Waste: To the best of our knowledge, this product if unused is not regarded as hazardous waste. However, the user must check with local regulatory guidelines in line with the materials of construction.

Packaging

Bagging:	Plastic (polyethylene)
Core:	Cardboard
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.

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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

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 1Example part number:

Product: Pallflex® Glass Fiber EO1340

Part Numbers: XE1340#####

Where:

(#####) indicates unique filter size

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