

# DuPont™ Teflon® PTFE

## APPLICATION PROFILE

### Filtration Membrane Increases Air Flow, Lowers Operating Costs

#### Introduction

Tetratex® 2, a microporous filter membrane made with DuPont™ Teflon® PTFE fluoropolymer resin, promises to reduce operating costs while maintaining extremely efficient particle collection. Applications include pollution control, dust collection and fluid separation.

The membrane's structure consists of billions of small, randomly connected fibers of Teflon® PTFE. Void volume is 80 to 90%, according to the manufacturer, Donaldson Membranes, a global leader in filter media.

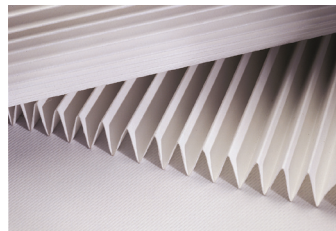
Donaldson supplies Tetratex® membrane or laminates thereof on virtually any woven, nonwoven or spunbonded material, including polypropylene, aramid, and polyester felts. Donaldson's customers fabricate such laminates into filter bags or cartridges and various other products.

#### Benefits Gained

**High air flow cuts energy use.** The unique open structure of Tetratex® 2 allows up to 40% greater air flow than conventional filtration media without sacrificing collection efficiency, according to Donaldson.

**Low pressure drop adds to savings.** The non-stick properties of Teflon® PTFE promote continuous release of dust cake. This minimizes pressure drop during operation and reduces the frequency of filter cleaning and replacement.

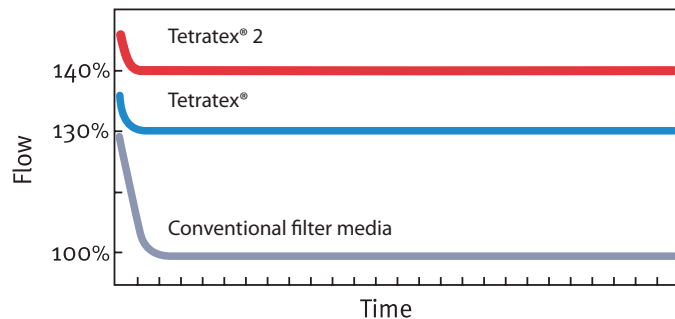
**Reduces emissions to near zero.** The membrane's tiny, randomly connected fibers of Teflon® PTFE create an effective pore size many times smaller than apparent pore size. The result is exceptionally fine particle retention to meet the strictest emission codes, according to Donaldson.



Cartridge Media



Filter Bag



Source: Donaldson Membranes



The miracles of science™

**Withstands harsh conditions.** Tetratex® 2 membranes made with Teflon® PTFE are chemically and dimensionally stable in temperature environments from -450 to 500°F (-270 to 260°C).

### **Material Chosen, and Why**

DuPont™ Teflon® PTFE fulfills requirements for non-stick performance, resistance to chemical attack and a very wide service-temperature range.

### **Manufacturer**

Donaldson Membranes  
Tel: 215-396-8349  
tetratex.com

For more information on DuPont™ Teflon®, please contact your local representative:

#### United States

DuPont Fluoroproducts  
P.O. Box 80713  
Wilmington, DE 19880  
Tel: 302-479-7731

#### Europe

DuPont de Nemours Int'l SA  
2, chemin du Pavillon  
P.O. Box 50  
CH-1218 Le Grand-Saconnex  
Geneva, Switzerland  
Tel: 22-717 51 11

#### Japan

DuPont Mitsui Fluorochemicals Co., Ltd.  
Chiyoda Honsha Building  
5-18, Sarugaku-cho-1 chome  
Chiyoda-ku, Tokyo 101  
Japan  
Tel: 81-3-5281-5872

#### Asia Pacific

DuPont China, Ltd.  
26/F, Tower 6, The Gateway  
9 Canton Road, Tsimshatsui  
Kowloon, Hong Kong  
Tel: 852-27341948

#### Canada

DuPont Canada, Inc.  
7070 Mississauga Road  
Mississauga, Ontario  
Canada L5M 2H3  
Tel: 800-207-0756

#### South America

DuPont do Brasil S/A  
Alameda Itapecuru, 506  
06454-080 Alphaville  
Barueri, Sao Paulo  
Brazil 0800-171715

**teflon.com**

Copyright © 2006 DuPont or its affiliates. All rights reserved. The DuPont Oval, DuPont™, The miracles of science™ and Teflon® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates.

Tetratex® is a registered trademark of Donaldson Company, Inc.

NO PART OF THIS MATERIAL MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE WITHOUT THE PRIOR WRITTEN PERMISSION OF DUPONT.



*The miracles of science™*