

DOW™ FILMTEC™ Membranes

Residential Solutions from Dow

The Problem

Resource investment to obtain NSF/ANSI 58 certification for point-of-use RO systems

The cost and time involved in obtaining point-of-use (POU) reverse osmosis (RO) system certifications can significantly impact how quickly an Original Equipment Manufacturer (OEM) realizes a return on investment from new product launches and new component supplier qualifications.

The Dow Solution

Save time, money and resources using Dow's data transfer testing program for your Drinking Water Treatment Unit (DWTU) NSF/ANSI 58 certification.

Certifications for safe use and performance by independent testing labs are critical to vetting a DWTU and demonstrating to the consumer the efficacy of the product from an objective organization using standard testing conditions. Yet qualifying new drinking water treatment systems is a costly and time consuming endeavor. The safe use and performance testing of individual components and the system as a whole can take months to obtain and costs tens of thousands of dollars. It is not uncommon for retesting and resubmitting of samples to occur, which only extends the time to market and creates unplanned costs and delays.

DOW™ FILMTEC™ membrane performance is world-class and sets the standard for contaminant reduction levels across the industry. In addition to passing the NSF/ANSI 58 standard for material safety for drinking water use, DOW FILMTEC standard TW30-1812 elements have been NSF/ANSI 58 performance certified with numerous other metal rejections, shown in Table 1.

Table 1. Metal rejections for NSF/ANSI Standard 58 listed DOW FILMTEC Membranes

Contaminant**	Average Percent
	Reduction*
Pentavalent Arsenic	99.6
Barium	98.8
Cadmium	98.8
Chromium (Hexavalent)	99.1
Chromium (Trivalent)	99.7
Copper	99.0
Fluoride	97.7
Lead	99.3
Radium 226/228	80.0
Selenium	98.1
Turbidity	98.9

^{*}These values are for properly maintained units and were obtained from a distinct DWTU under NSF/ANSI 58. Poorly maintained units will not be as effective at removing contaminants and, in the worst case, may not remove any contaminants. The test data results may be transferred to other manufacturer's DWTU, if the system meets the requirements contained on the NSF document entitled, "Data Transfer Procedure for Devices using FilmTec Reverse Osmosis", dated 05/03/07.

^{**} OEMs are responsible for their DWTU systems passing NSF/ANSI Standard 58 material safety and TDS reduction tests. NSF/ANSI Standard 58 listed DOW FILMTEC membranes have also passed NSF 58 cyst and nitrate reduction tests, which are DWTU dependent and are not transferable.

The Dow Solution Cont.

Dow and NSF International have, in a joint effort, developed a data transfer procedure which allows for the assignment of the reduction claims in Table 1 for qualifying POU RO systems that use NSF/ANSI Standard 58 listed DOW FILMTEC Membranes. Qualifying OEMs expedite the process of getting DWTU performance certifications for their systems and can access the market more quickly.

To qualify for the DOW-NSF 58 Data Transfer, partnering OEMs can submit DOW FILMTEC home drinking water elements in prospective RO units to NSF. If the qualifying RO unit meets the predefined performance criteria, then the OEM is eligible to transfer the Dow performance data in Table 1. Qualifying OEMs are free to include the performance data in their manuals and promotional material. Please contact a Dow Water & Process Solutions representative for more details on how to benefit from this offering.

NSF Data Transfer Benefit Summary

- Save Time: Data transfer shortens certification times by months and allows for earlier product launch dates.
- Save Money: Can save tens of thousands of dollars in NSF/ANSI 58 performance certification costs.
- Save Resources: Transferring Dow-NSF 58 performance data reduces the effort required for OEMs to launch their products into the market.
- Performance and Reliability: DOW FILMTEC home drinking water elements are eligible for NSF performance certification transferability because they are manufactured to the highest performance and reliability standards in the industry today. OEMs can trust that DOW FILMTEC products are synonymous with Performance, Reliability, Consistency and Leadership.

For a complete list of DOW FILMTEC membrane elements and claims, please log on to the internet:

http://www.nsf.org/Certified/DWTU/Listings.asp?Company=44420&Standard=058.

DOW™ FILMTEC™ Membranes For more information about DOW FILMTEC membranes, call the Dow Water & Process Solutions business:

North America: 1-800-447-4369 Latin America: (+55) 11-5188-9222 Europe: (+32) 3-450-2240 Pacific: +60 37958 3392 Japan: +81 3 5460 2100 China: +86 21 3851 1000 http://www.dowwatersolutions.com **Notice:** The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water. Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

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