



# PERFORMANCE DATA SHEET

A. O. Smith water filtration systems are obsessively engineered to provide you with clean water. A Performance Data Sheet is your proof that the system performs; the data sheet discloses test results of each filtration system against NSF water filtration testing criteria and standards.

NSF-International is an independent certification organization that develops test protocols and standards for drinking water filtration systems. NSF requires that each contaminant is reduced by a certain percentage specific to the water filtration system.

Take a look. Review the data. If you need help or have a question, we've got you covered.

Give us a call at  
**877.333.7108**

For additional information, visit [www.nsf.org](http://www.nsf.org).

| Performance Data Sheet for the A. O. Smith CWM Clean Water Machine                                  |             |                          |                            |                          |                    |
|-----------------------------------------------------------------------------------------------------|-------------|--------------------------|----------------------------|--------------------------|--------------------|
| Models                                                                                              | Replacement | Operating pressure range | Rated capacity             | Operating temp. range    | Rated flow         |
| AO-CWM                                                                                              | AO-US-100-R | 20-70 psi<br>137-482 kPa | 320 gallons<br>1200 liters | 40-90° F<br>4,44-32,2° C | 0.5 gpm<br>1.8 lpm |
| Manufactured by: A. O. Smith Corporation 11270 West Park Place   Milwaukee, WI 53224   877.333.7108 |             |                          |                            |                          |                    |



Testing Performed under NSF/ANSI Standards 42 and 53 and in accordance with the California Department of Health Services Drinking Water Treatment Device Program. This system has been tested according to NSF/ANSI 42, 53, 401 & P473 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42, 53, 401 & P473.

| NSF/ANSI 42                          | Minimum Reduction | Overall % Reduction | Results |
|--------------------------------------|-------------------|---------------------|---------|
| Chlorine Reduction, Free Available   | <0.5 mg/l         | 96.06%              | Pass    |
| Chloramine Reduction, Free Available | <0.5 mg/l         | 96.06%              | Pass    |
| Particulate Reduction                | 85%               | 99.9%               | Pass    |

| NSF/ANSI 53                         | Minimum Reduction | Overall % Reduction | Results |
|-------------------------------------|-------------------|---------------------|---------|
| Cyst Live Cryptosporidium & Giardia | 99.95%            | >99.95%             | Pass    |
| Mercury Reduction pH 8.5            | <2 ug/L           | >96.7%              | Pass    |
| Mercury Reduction pH 6.5            | <2 ug/L           | >96.6%              | Pass    |
| Lead Reduction pH 6.5               | <10 ug/L          | >99.3%              | Pass    |
| Lead Reduction pH 8.5               | <10 ug/L          | >99.4%              | Pass    |
| MTBE Reduction                      | <5 ug/L           | 91.2%               | Pass    |
| Turbidity                           | <0.5 NTU          | 99.1%               | Pass    |
| VOC Surrogate Test                  | 95%               | 95%                 | Pass    |
| Asbestos                            | 99%               | >99%                | Pass    |

| NSF/ANSI 401  | Maximum Concentration | Minimum Reduction | Overall % Reduction | Results |
|---------------|-----------------------|-------------------|---------------------|---------|
| Atenolol      | 30 ng/L               | 94.2%             | 94.2%               | Pass    |
| Bisphenol A   | 300 ng/L              | 98.80%            | 98.9%               | Pass    |
| Carbamazepine | 200 ng/L              | 98.6%             | 98.6%               | Pass    |
| DEET          | 200 ng/L              | 98.7%             | 98.7%               | Pass    |
| Estrone       | 20 ng/L               | 96.30%            | 96.5%               | Pass    |
| Ibuprofen     | 60 ng/L               | 95.3%             | 95.4%               | Pass    |
| Linuron       | 20 ng/L               | 96.6%             | 96.6%               | Pass    |
| Meprobamate   | 60 ng/L               | 94.7%             | 94.7%               | Pass    |
| Metolachlor   | 200 ng/L              | 98.6%             | 98.6%               | Pass    |
| Naproxen      | 20 ng/L               | 96.3%             | 96.4%               | Pass    |
| Nonyl phenol  | 200 ng/L              | 97.50%            | 97.5%               | Pass    |
| Phenytol      | 30 ng/L               | 95.50%            | 95.6%               | Pass    |
| TCEP          | 700 ng/L              | 98%               | 98%                 | Pass    |
| TCP           | 700 ng/L              | 97.8%             | 97.8%               | Pass    |
| Trimethoprim  | 20 ng/L               | 96.7%             | 96.7%               | Pass    |

| NSF P473                                                         | Influent challenge concentration | Maximum permissible concentration | Overall % reduction | Results |
|------------------------------------------------------------------|----------------------------------|-----------------------------------|---------------------|---------|
| Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS) | 1.5 ±10% ug/L                    | 0.07 ug/L                         | 95.8%               | Pass    |

| Organic chemicals included by surrogate testing |                                                 |                      |                    |                   |
|-------------------------------------------------|-------------------------------------------------|----------------------|--------------------|-------------------|
| VOCs (by surrogate testing using chloroform)    | Drinking water regulatory level (MCL/ MAC mg/L) | Influent/ Unfiltered | Effluent/ Filtered | Percent Reduction |
| alachlor                                        | 0.002                                           | 0.050                | 0.001              | >98%              |
| atrazine                                        | 0.003                                           | 0.100                | 0.003              | >97%              |
| benzene                                         | 0.005                                           | 0.081                | 0.001              | >99%              |
| carbofuran                                      | 0.04                                            | 0.190                | 0.001              | >99%              |
| carbon tetrachloride                            | 0.005                                           | 0.078                | 0.0018             | 98%               |
| chlorobenzene                                   | 0.1                                             | 0.077                | 0.001              | >99%              |
| chloropicrin                                    | —                                               | 0.015                | 0.0002             | 99%               |
| 2,4-D                                           | 0.07                                            | 0.110                | 0.0017             | 98%               |
| dimethylchloropropane (DMCP)                    | 0.0002                                          | 0.052                | 0.00002            | >99%              |
| o-dichlorobenzene                               | 0.6                                             | 0.080                | 0.001              | >99%              |
| p-dichlorobenzene                               | 0.075                                           | 0.040                | 0.001              | >98%              |
| 1,2-dichloroethane                              | 0.005                                           | 0.088                | 0.0048             | 95%               |
| 1,1-dichloroethylene                            | 0.007                                           | 0.083                | 0.001              | >99%              |
| cis-1,2-dichloroethylene                        | 0.07                                            | 0.170                | 0.0005             | >99%              |
| trans-1,2-dichloroethylene                      | 0.1                                             | 0.086                | 0.001              | >99%              |
| 1,2-dichloropropane                             | 0.005                                           | 0.080                | 0.001              | >99%              |
| cis-1,3-dichloropropylene                       | —                                               | 0.079                | 0.001              | >99%              |
| dinoseb                                         | 0.007                                           | 0.170                | 0.0002             | 99%               |
| endrin                                          | 0.002                                           | 0.053                | 0.00059            | 99%               |
| ethylbenzene                                    | 0.7                                             | 0.088                | 0.001              | >99%              |
| ethylene dibromide (EDB)                        | 0.00005                                         | 0.044                | 0.00002            | >99%              |
| haloacetonitriles (HAN)                         | —                                               | —                    | —                  | —                 |
| bromochloroacetonitrile                         | —                                               | 0.022                | 0.0005             | 98%               |
| dibromochloroacetonitrile                       | —                                               | 0.024                | 0.0006             | 98%               |
| dichloroacetonitrile                            | —                                               | 0.0096               | 0.0002             | 98%               |
| trichloroacetonitrile                           | —                                               | 0.015                | 0.0003             | 98%               |
| haloketones (HK)                                | —                                               | —                    | —                  | —                 |
| 1,1-dichloro-2-propanone                        | —                                               | 0.0072               | 0.0001             | 99%               |
| 1,1,1-trichloro-2-propanone                     | —                                               | 0.0082               | 0.0003             | 96%               |
| heptachlor (H-34, Heptox)                       | 0.0004                                          | 0.025                | 0.00001            | >99%              |
| heptachlor epoxide                              | 0.0002                                          | 0.0107               | 0.0002             | 98%               |
| hexachlorobutadiene                             | —                                               | 0.044                | 0.001              | >98%              |
| hexachlorocyclopentadiene                       | 0.05                                            | 0.060                | 0.00002            | >99%              |
| lindane                                         | 0.0002                                          | 0.055                | 0.00001            | >99%              |
| methoxychlor                                    | 0.04                                            | 0.050                | 0.0001             | >99%              |
| pentachlorophenol                               | 0.001                                           | 0.096                | 0.001              | >99%              |
| simazine                                        | 0.004                                           | 0.120                | 0.004              | >97%              |
| styrene                                         | 0.1                                             | 0.150                | 0.0005             | >99%              |
| 1,1,2,2-tetrachloroethane                       | —                                               | 0.081                | 0.001              | >99%              |
| tetrachloroethylene                             | 0.005                                           | 0.081                | 0.001              | >99%              |
| toluene                                         | 1                                               | 0.078                | 0.001              | >99%              |
| 2,4,5-TP (silvex)                               | 0.05                                            | 0.270                | 0.0016             | 99%               |
| tribromoacetic acid                             | —                                               | 0.042                | 0.001              | >98%              |
| 1,2,4-trichlorobenzene                          | 0.07                                            | 0.160                | 0.0005             | >99%              |
| 1,1,1-trichloroethane                           | 0.2                                             | 0.084                | 0.0046             | 95%               |
| 1,1,2-trichloroethane                           | 0.005                                           | 0.150                | 0.0005             | >99%              |
| trichloroethylene                               | 0.005                                           | 0.180                | 0.0010             | >99%              |
| trihalomethanes (THMs)                          | —                                               | Influent/ Unfiltered | Effluent/ Filtered | Percent Reduction |
| bromodichloromethane (THM)                      | 0.080                                           | 0.300                | 0.015              | 95%               |
| bromoform (THM)                                 |                                                 |                      |                    |                   |
| chlorodibromomethane (THM)                      |                                                 |                      |                    |                   |
| xylene (total)                                  | 10                                              | 0.070                | 0.001              | >99%              |



System Tested and Certified by NSF International against NSF/ANSI Standard 42, 53 & 401 and conforms to NSF protocol P473 for reduction of claims specified on the Performance Data Sheet and at [www.nsf.org](http://www.nsf.org).

- All contaminants reduced by this filter are listed.
- Not all contaminants listed may be present in your water.
- Does not remove all contaminants that may be present in tap water.



Filter is only to be used with cold water.



Filter usage must comply with all state and local laws.



Testing was performed under standard laboratory conditions, actual performance may vary.



Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.



See owner's manual for general installation conditions and needs plus manufacturer's limited warranty.



For use with municipally treated water only. Do not use with water that is microbiologically unsafe or of unknown water quality without adequate disinfection before or after the system.

| Hoja de datos de rendimiento de la máquina de agua limpia CWM de A. O. Smith       |             |                                    |                            |                                  |                    |
|------------------------------------------------------------------------------------|-------------|------------------------------------|----------------------------|----------------------------------|--------------------|
| Modelos                                                                            | Repuesto    | Rango de presión de funcionamiento | Capacidad nominal          | Rango de temp. de funcionamiento | Flujo nominal      |
| AO-CWM                                                                             | AO-US-100-R | 137 a 482 kPa<br>20 a 70 psi       | 1211 litros<br>320 galones | 4,44 a 32,2 °C<br>40 a 90 °F     | 1,8 lpm<br>0,5 gpm |
| Manufactured by: A. O. Smith Corporation 11270 West Park Place Milwaukee, WI 53224 |             |                                    |                            |                                  |                    |



Pruebas realizadas conforme a las normas NSF/ANSI 42 y 53 y según el Programa de Dispositivos de Tratamiento de Agua Potable del Departamento de Servicios de Salud de California. Este sistema se probó conforme a las normas NSF/ANSI 42, 53, 401 y P473 para la reducción de las sustancias que se indican más adelante. Se redujo la concentración de las sustancias indicadas en el agua que entra al sistema a una concentración menor o igual al límite permitido para el agua que sale del sistema, según se especifica en las normas NSF/ANSI 42, 53, 401 y P473.

| NSF/ANSI 42                          | Reducción mínima | Porcentaje total de reducción | Resultados |
|--------------------------------------|------------------|-------------------------------|------------|
| Chlorine Reduction, Free Available   | <0.5 mg/l        | 96.06 %                       | Aprobado   |
| Chloramine Reduction, Free Available | <0.5 mg/l        | 96.06 %                       | Aprobado   |
| Particulate Reduction                | 85 %             | 99.9 %                        | Aprobado   |

| NSF/ANSI 53                         | Reducción mínima | Porcentaje total de reducción | Resultados |
|-------------------------------------|------------------|-------------------------------|------------|
| Cyst Live Cryptosporidium & Giardia | 99.95 %          | >99.95 %                      | Aprobado   |
| Mercury Reduction pH 8.5            | <2 ug/L          | >96.7 %                       | Aprobado   |
| Mercury Reduction pH 6.5            | <2 ug/L          | >96.6 %                       | Aprobado   |
| Lead Reduction pH 6.5               | <10 ug/L         | >99.3 %                       | Aprobado   |
| Lead Reduction pH 8.5               | <10ug/L          | >99.4 %                       | Aprobado   |
| MTBE Reduction                      | <5 ug/L          | 91.2 %                        | Aprobado   |
| Turbidity                           | <0.5 NTU         | 99.1 %                        | Aprobado   |
| VOC Surrogate Test                  | 95 %             | 95 %                          | Aprobado   |
| Asbestos                            | 99 %             | >99 %                         | Aprobado   |

| NSF/ANSI 401  | Concentración máxima | Reducción mínima | Porcentaje total de reducción | Resultados |
|---------------|----------------------|------------------|-------------------------------|------------|
| Atenolol      | 30 ng/L              | 94.2 %           | 94.2 %                        | Aprobado   |
| Bisphenol A   | 300 ng/L             | 98.80 %          | 98.9 %                        | Aprobado   |
| Carbamazepine | 200 ng/L             | 98.6 %           | 98.6 %                        | Aprobado   |
| DEET          | 200 ng/L             | 98.7 %           | 98.7 %                        | Aprobado   |
| Estrone       | 20 ng/L              | 96.30 %          | 96.5 %                        | Aprobado   |
| Ibuprofen     | 60 ng/L              | 95.3 %           | 95.4 %                        | Aprobado   |
| Linuron       | 20 ng/L              | 96.6 %           | 96.6 %                        | Aprobado   |
| Meprobamate   | 60 ng/L              | 94.7 %           | 94.7 %                        | Aprobado   |
| Metolachlor   | 200 ng/L             | 98.6 %           | 98.6 %                        | Aprobado   |
| Naproxen      | 20 ng/L              | 96.3 %           | 96.4 %                        | Aprobado   |
| Nonyl phenol  | 200 ng/L             | 97.50 %          | 97.5 %                        | Aprobado   |
| Phenytol      | 30 ng/L              | 95.50 %          | 95.6 %                        | Aprobado   |
| TCEP          | 700 ng/L             | 98 %             | 98 %                          | Aprobado   |
| TCPP          | 700 ng/L             | 97.8 %           | 97.8 %                        | Aprobado   |
| Trimethoprim  | 20 ng/L              | 96.7 %           | 96.7 %                        | Aprobado   |

| NSF P473                                                         | Concentración de riesgo de ingreso | Concentración máxima permitida | Porcentaje total de reducción | Resultados |
|------------------------------------------------------------------|------------------------------------|--------------------------------|-------------------------------|------------|
| Perfluorooctanoic acid (PFOA) & Perfluorooctane sulfonate (PFOS) | 1.5 ± 10 ug/L                      | 0.07 ug/L                      | 95.8 %                        | Aprobado   |

#### Productos químicos orgánicos incluidos por la prueba de sustitutos

| COV (según la prueba de sustitutos con el uso de cloroformo) | Nivel normativo de agua potable (NMC/CMA mg/L) | Entrante/ Sin filtrar | Saliente/ Filtrada | Porcentaje de reducción |
|--------------------------------------------------------------|------------------------------------------------|-----------------------|--------------------|-------------------------|
| alachlor                                                     | 0.002                                          | 0.050                 | 0.001              | >98 %                   |
| atrazine                                                     | 0.003                                          | 0.100                 | 0.003              | >97 %                   |
| benzene                                                      | 0.005                                          | 0.081                 | 0.001              | >99 %                   |
| carbofuran                                                   | 0.04                                           | 0.190                 | 0.001              | >99 %                   |
| carbon tetrachloride                                         | 0.005                                          | 0.078                 | 0.0018             | 98 %                    |
| chlorobenzene                                                | 0.1                                            | 0.077                 | 0.001              | >99 %                   |
| chloropicrin                                                 | —                                              | 0.015                 | 0.0002             | 99 %                    |
| 2,4-D                                                        | 0.07                                           | 0.110                 | 0.0017             | 98 %                    |
| dibromochloropropane (DBCP)                                  | 0.0002                                         | 0.052                 | 0.00002            | >99 %                   |
| o-dichlorobenzene                                            | 0.6                                            | 0.080                 | 0.001              | >99 %                   |
| p-dichlorobenzene                                            | 0.075                                          | 0.040                 | 0.001              | >98 %                   |
| 1,2-dichloroethane                                           | 0.005                                          | 0.088                 | 0.0048             | 95 %                    |
| 1,1-dichloroethylene                                         | 0.007                                          | 0.083                 | 0.001              | >99 %                   |
| cis-1,2-dichloroethylene                                     | 0.07                                           | 0.170                 | 0.0005             | >99 %                   |
| trans-1,2-dichloroethylene                                   | 0.1                                            | 0.086                 | 0.001              | >99 %                   |
| 1,2-dichloropropane                                          | 0.005                                          | 0.080                 | 0.001              | >99 %                   |
| cis-1,3-dichloropropylene                                    | —                                              | 0.079                 | 0.001              | >99 %                   |
| dinoseb                                                      | 0.007                                          | 0.170                 | 0.0002             | 99 %                    |
| endrin                                                       | 0.002                                          | 0.053                 | 0.00059            | 99 %                    |
| ethylbenzene                                                 | 0.7                                            | 0.088                 | 0.001              | >99 %                   |
| ethylene dibromide (EDB)                                     | 0.0005                                         | 0.044                 | 0.00002            | >99 %                   |
| haloacetonitriles (HAN)                                      | —                                              | —                     | —                  | —                       |
| bromochloroacetnitrile                                       | —                                              | 0.022                 | 0.0005             | 98 %                    |
| dibromooacetnitrile                                          | —                                              | 0.024                 | 0.0006             | 98 %                    |
| dichloroacetnitrile                                          | —                                              | 0.0096                | 0.0002             | 98 %                    |
| trichloroacetnitrile                                         | —                                              | 0.015                 | 0.0003             | 98 %                    |
| haloketones (HK)                                             | —                                              | —                     | —                  | —                       |
| 1,1-dichloro-2-propanone                                     | —                                              | 0.0072                | 0.0001             | 99 %                    |
| 1,1,1-trichloro-2-propanone                                  | —                                              | 0.0082                | 0.0003             | 96 %                    |
| heptachlor (H-34, Heptox)                                    | 0.0004                                         | 0.025                 | 0.00001            | >99 %                   |
| heptachlor epoxide                                           | 0.0002                                         | 0.0107                | 0.0002             | 98 %                    |
| hexachlorobutadiene                                          | —                                              | 0.044                 | 0.001              | >98 %                   |
| hexachlorocyclopentadiene                                    | 0.05                                           | 0.060                 | 0.000002           | >99 %                   |
| lindane                                                      | 0.0002                                         | 0.055                 | 0.00001            | >99 %                   |
| methoxychlor                                                 | 0.04                                           | 0.050                 | 0.0001             | >99 %                   |
| pentachlorophenol                                            | 0.001                                          | 0.096                 | 0.001              | >99 %                   |
| simazine                                                     | 0.004                                          | 0.120                 | 0.004              | >97 %                   |
| styrene                                                      | 0.1                                            | 0.150                 | 0.0005             | >99 %                   |
| 1,1,2,2-tetrachloroethane                                    | —                                              | 0.081                 | 0.001              | >99 %                   |
| tetrachloroethylene                                          | 0.005                                          | 0.081                 | 0.001              | >99 %                   |
| toluene                                                      | 1                                              | 0.078                 | 0.001              | >99 %                   |
| 2,4,5-TP (silvex)                                            | 0.05                                           | 0.070                 | 0.0016             | 99 %                    |
| tribromoacetic acid                                          | —                                              | 0.042                 | 0.001              | >98 %                   |
| 1,2,4-trichlorobenzene                                       | 0.07                                           | 0.160                 | 0.0005             | >99 %                   |
| 1,1,1-trichloroethane                                        | 0.2                                            | 0.084                 | 0.0046             | 95 %                    |
| 1,1,2-trichloroethane                                        | 0.005                                          | 0.150                 | 0.0005             | >99 %                   |
| trichloroethylene                                            | 0.005                                          | 0.180                 | 0.0010             | >99 %                   |
| trihalomethanes (THMs)                                       | —                                              | Entrante/ Sin filtrar | Saliente/ Filtrada | Porcentaje de reducción |
| bromodichloromethane (THM)                                   | —                                              | —                     | —                  | —                       |
| bromoform (THM)                                              | 0.080                                          | 0.300                 | 0.015              | 95 %                    |
| chloroform (THM)                                             | —                                              | —                     | —                  | —                       |
| chlorodibromomethane (THM)                                   | —                                              | —                     | —                  | —                       |
| xylene (total)                                               | 10                                             | 0.070                 | 0.001              | >99 %                   |



Sistema Probado y Certificado por NSF International según las normas NSF/ANSI 42, 53 y 401, y conforme al protocolo P473 de NSF para la reducción de las declaraciones especificadas en la Hoja de datos de rendimiento y en [www.nsf.org](http://www.nsf.org).

- Se indican todos los contaminantes que reduce este filtro.
- Es posible que no todos los contaminantes indicados estén presentes en su agua.
- No elimina todos los contaminantes que pueden estar presentes en el agua de la llave.



El filtro solo se debe usar con agua fría.



El uso del filtro debe cumplir con todas las leyes estatales y locales.



Las pruebas se realizaron en condiciones de laboratorio estándar, el rendimiento real puede variar.



Es posible usar sistemas certificados para la reducción de quistes en aguas desinfectadas que puedan tener quistes filtrables.



Consulte el manual del propietario para conocer las condiciones y necesidades generales de instalación más la garantía limitada del fabricante.



Solo para uso con agua tratada localmente. No usar con agua que no sea microbiológicamente segura o cuya calidad sea desconocida sin la desinfección previa o posterior adecuada del sistema.