



KDF Dealer Application Bulletin

KDF Fluid Treatment, Inc. • Research and Development Laboratory • Three Rivers, Michigan

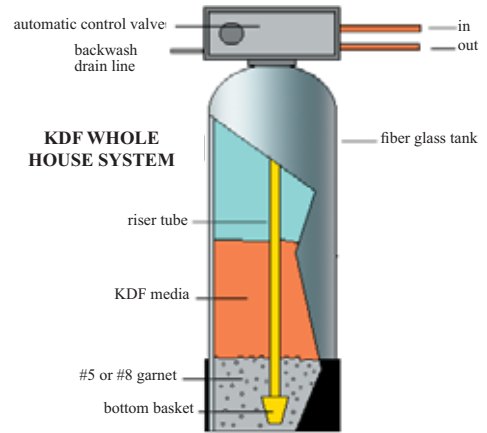
For Point-of-Entry Water Treatment Systems
4-11 Gallons per Minute

KDF® Process Media are high-purity copper-zinc granules that use redox (the exchange of electrons) to remove chlorine, hydrogen sulfide, soluble heavy metals and microorganisms from water. KDF 55 process medium is an effective chlorine removal agent used in point-of-entry (POE) treatment of municipal water supplies. KDF 85 process medium is an effective iron (ferrous) and hydrogen sulfide (H₂S) removal agent that may be used alone or to protect existing water filtration/purification technologies in POE treatment of groundwater supplies. This bulletin describes the use of KDF media in residential (whole house) applications having potable water service flow in a range from 4 to 11 gallons per minute (gpm).

KDF Media POE Recommended Operating Conditions
(use 3-cycle valve)

Service flow	15 gpm/ft ²
Backwash for 10 min. @	twice the service flow
purge/rinse for 3 min.	twice the service flow
Bed expansion, backwash	10 to 15%
Free board	20%
Minimum bed depth (6" dia.)	10"
pH range: drinking water	6.5 to 8.5
Water temperature, influent	35°F to 212°F

(Always maintain wetness)



Backwashing KDF Process Media - In electro-chemical reduction processes, small amounts of oxides are formed when KDF process media are used in POE water treatment systems. These oxides must be periodically backwashed. Remember to remove any restrictors. Time the backwash for ten minutes and purge for three minutes. Backwash daily or more frequently if necessary, depending upon the quality of the water supply. Backwashing requires twice the service flow rate. Do not restrict pipe size to the drain.

Note: If backwashing procedures are not properly followed, KDF process media may become fouled. For proper cleaning techniques, contact KDF's Technical Department.

Maximum Service Flow (gpm)	Tank Size Diameter (inches)	Backwash Valve Required	Distributor	Minimum Backwash Rate (gpm)	Pipe Size Diameter (inches)	Bed Depth (inches)	Weight (lbs)	Volume (cu. ft.)	No. of Drums
4	7 × 40	3-cycle	Fine slotted (bottom stacked recommended)	8	0.75	11	42.8	0.25	0.75
5	7 × 44			8	0.75	15	57.0	0.33	1.0
5.5	8 × 40			10	0.75	12	57.0	0.33	1.0
6	9 × 44			12	0.75	13	85.5	0.50	1.5
8	10 × 44			16	0.75	14	114.0	0.66	2.0
11	12 × 48			22	1	16	171.0	1.00	3.0



Solutions for economical clean water.™
KDF Fluid Treatment, Inc.

1500 KDF Drive, Three Rivers, Michigan 49093-9287
 Toll-free: 1-800-437-2745 • Phone: 1-269-273-3300 • Fax: 1-269-273-4400
 Toll-free Fax: 1-800-553-3584 • E-mail: info@kdfitt.com • Web: www.kdfitt.com



This Reduction Oxidation Media is Tested and Certified by NSF International against NSF/ANSI Standard 42 for material requirements only.



This Reduction Oxidation Media is Tested and Certified by NSF International against NSF/ANSI Standard 61 for material requirements only.

NOTICE: As of this printing, KDF Fluid Treatment believes the data herein are reliable and accurate. The data are based on outside and internal laboratory tests. Due to varying water chemistry, it is recommended that users test performance on their own equipment. As technical assistance is furnished by KDF Fluid Treatment at no charge to the user and since KDF Fluid Treatment has no control over engineering of hardware incorporating the KDF® media, KDF Fluid Treatment assumes no liability or responsibility for such assistance. Due to synthetic procedures used by outside laboratories, KDF Fluid Treatment is not responsible for differing results in the field. KDF Fluid Treatment assumes no responsibility for user claims on the pesticidal abilities of KDF media because of varying water chemistry and users' applications. Since governmental regulations may differ from one location to another and may change from time to time, KDF Fluid Treatment is not responsible for users' manufacturing procedures, disposal practices, selection of media, or claims or advertising by the user. No warranty, express or implied is given nor is freedom from any patent owned by KDF Fluid Treatment or others to be inferred.