

# Filtration Media

When you need it now... or don't know how

PLUMBING & HEATING • PUMPS • WATER CONDITIONING MULTIFAMILY HOUSING SUPPLIES

**CATALOG** 

610-275-4453 duffcompany.com

#### **FILTRATION MEDIA**

**ACTIVATED CARBON (Coarse Grade)** A coarse grade of carbon used in chlorine and taste & odor removal by adsorption. The 8x30 mesh size allows treatment with the least amount of flow loss, and filters particles 40 micron and higher.

**ACTIVATED CARBON (Fine Grade)** A fine grade of high quality carbon used for taste, odor, chlorine and organics removal, including VOCs. The 12 x 40 mesh size traps particles 30 micron and higher.

KDF-55 A bi-metal, copper-zinc, material used in chlorine, and heavy metal removal as well as the removal of corrosion and microorganisms. Chlorine is changed by the exchange of electrons and heavy metals bond to the media. Use in pH range of 6.5-8.5 and TDS greater than 150 ppm. KDF can control bacteria, algae, mold and fungi growth. When used with activated carbon, KDF 55 extends the life of the carbon media.

**KDF-85** A bi-metal, copper-zinc, material used in iron and hydrogen sulfide removal. Iron is reduced and hydrogen sulfide is oxidized in this oxidation/ reduction process. KDF can control bacteria, algae and fungi growth.

**CENTAUR CATALYTIC CARBON** Centaur 12x40 is a liquid phase virgin activated carbon that has been manufactured from bituminous coal to promote catalytic reactions. Centaur can be used for the promotion of oxidation, reduction, decomposition, substitution and emanation reactions.

**CALCITE** Acidic waters on contact with calcite slowly dissolve the calcium carbonate media to raise the pH which reduces the potential leaching of copper, lead and other metals found in typical plumbing systems. Periodic backwashing will prevent packing and maintain high service rates. As the Calcite's calcium carbonate neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter.

**COROSEX** By neutralizing the free carbon dioxide in water, Corosex can correct red water conditions and render it to a non- corrosive condition. Corosex , being a reactive magnesium oxide, is used most effectively where pH correction is substantial or high flow conditions are in use. Corosex, being soluble to acidity, will have to be replenished periodically. Corosex can be effectively combined with Calcite to combine the high flow neutralization properties of Corosex, along with the slower reacting low flow properties of Calcite reducing potentially high basic properties due to overcorrection.

**THOMASVILLE LIME** is a mixture of calcite and magnesium carbonate that helps reduce the aggressive nature of the low PH water.

**GEORGE MARBLE (XO WHITE NSF):** A calcium carbonate media commonly referred to as calcite, this is made from naturally occurring, high-quality marble. Treatment is accomplished by neutralizing the water, passing acidic water through this granular substance. Commonly used for pH adjustment, corrosion control, and remineralization of desalinated water.

**FLOMAG PWT MAGNESIUM OXIDE:** granular filter media specifically designed for potable water treatment. FloMag PWT is certified by NSF to conform to the requirement of NSF Standard 60 for Drinking Water Chemicals under the categories of pH adjustment and coagulation and flocculation. FloMag PWT is designed for point of use neutralization and applications requiring removal of soluble cationic heavy metals such as lead, using filter bed or column technology.

**MANGANESE GREENSAND** A glutonite greensand that is a catalytic material, capable of removing iron, manganese, and hydrogen sulfide. This media must be regenerated intermittently with potassium permanganate or continuously with chlorine or lt chlorine potassium permanganate mixture.

**GREENSAND PLUS**: Greensand Plus is the only alternate media that is an exact replacement for manganese greensand without any alterations to service rates, run lengths, backwash or air/water wash times or rates, or chemical feeds. In new installations, it may be possible to use this substitute product in applications that manganese greensand could not handle, such as higher temperatures, low dissolved solids or low-silica waters. The substitute product also can be operated beyond the 10 psi differential pressure limit that applies to manganese greensand. Greensand Plus, however, does not require potassium permanganate to regenerate; rather, chlorine or another strong oxidant like hydrogen peroxide will suffice.

**BIRM** Birin is a light weight catalyst filter material used in iron and manganese removal. When sufficient dissolved oxygen is present, naturally or by air induction, an oxidizing reaction will take place. The oxidized iron or manganese is then filterable by the filter material. Birin is a plastic bead coated with naturally occurring manganese oxide.

**PYROLOX** Works on the principal of catalyst reaction for the removal of iron, hydrogen sulfide and manganese. Sufficient oxygen must exist in the water, naturally or by air induction. This media does not require regeneration but is a heavy material that requires vigorous backwashing on a daily basis.

**FILOX:** uses an oxidation-reduction reaction to remove iron, hydrogen sulfide and manganese from the water. Filox-R has a PH sensitivity from 5.0 to 9.0 scale. Highest flow rate of any standard iron removal media, 6 gpm/cu.ft service flow; 12-15 gpm/sq.ft backwash rate.

**KATALOX LIGHT**: Katalox Light's composition makes it outstanding against other filters such as sand, Birm, Greensand Plus, and others. It's engineered with a unique coating, providing it light weight, higher filtration surface, more service life and more reliable performance than many other existing granular filter media. Katalox Light is used to remove iron, manganese, hydrogen sulfide, arsenic, radium, heavy Metals and radionuclides. Katalox Light does not need pH of 6.5, but it should be higher than 5.6. Oxygen in water plays no role in its effectiveness. Media should only be backwashed for one hour just after filling in the tank. Will raise PH.

**MTM:** MTM is a granular manganese dioxide used for reducing iron, manganese and hydrogen sulfide from residential water supplies. Its active surface coating oxidizes and precipitates soluble iron and manganese. Hydrogen sulfide is oxidized to a sulfur. The precipitates are filtered out in the granular bed and removed by backwashing.

**MULTI-MEDIA** Multi-media is reverse graded layers of filter media including anthracite, sand, garnet, and gravel. The largest and lightest material is on the top, trapping the largest particles. In descending order the next heaviest and smaller media traps the next largest particles, and so on until the smaller particle is trapped in the bottom layer. This process allows for higher flow rates and filtration down to 10 micron sized particles. Good for sediment, turbidity, and red water iron.

**FILTER-Ag** Filter-Ag granuals have irregular surface characteristics affording maximum removal of suspended matter throughout the filter bed. Filter-Ag can be applied to systems designed for either pressure or gravity flow. Filter-Ag has many outstanding advantages over the more common granular filter medias used for suspended solids removal. A substantial saving can be realized, when designing a system using Filter-Ag, because equipment can be smaller, requiring less square foot area. Filter-Ag is lightweight a substance with means additional saving in backwash rates. Filter-Ag typically removes the normal suspended solids, down to the the 20-40 micron range.

#### FILTRATION MEDIA

FILTER AG PLUS: a unique natural ore called clinoptilolite that has many outstanding advantages over common granular filter sands and multimedia used for suspended solids reduction. Its low pressure drop, high service flow rates and high bed loadings combined with lower backwash frequency allow economy in equipment downsizing and reduced pumping requirements. While Filter-Ag typically reduces suspended solids down to the 20-40 micron range, Filter-Ag Plus can reduce down to the 5 micron or less range.

**GRAVEL** Gravel is used as a support to keep smaller medias out of the distribution system and to stop channeling of water. Minimum layers of 3"per size is suggested. A high proportion are rounded and tend toward a spherical shape.

**SAND** 99% of the water purified in the world today is accomplished by passing the water through 'rapid sand filters''. Theoretically the upper layer of the bed performs the filtration, while the lower layers provide the necessary support and assist in the hydraulics involved during the backwash cycle. The chemical and physical properties are important. The media must be hard, not smooth, and free of soluble particles.

**GARNET** Garnet is a naturally hard, durable, high specific gravity mineral. Resistance to attrition means less loss of media and shutdown time. High specific gravity means more control during backwash and lower losses to drain. The angular shape provides more ability to filter and longer production runs.

ANTHRACITE The use of anthracite coal as a filter media predates the 1930's. This is a particular hard coal product which is produced from selected Pennsylvania coals. These coals are not readily found and have low ash and friability while being high in anthraxylor. After selection, the coal is cleaned (reduction in ash content), screened and classified to the proper sized for water filtration purposes. The advantages in use versus silica and quartz sands and gravels are: longer mns between backwashes, higher flow rates without headloss, lower backwash water pressures and/or quantities, a greater utilization of the bed mass for filtration, and a volumetric higher surface area.

FILTERSORB: An anti-scale media that prevents the buildup of scale in plumbing pipes and fixtures. Filtersorb converts hardness ions into harmless crystal particles so the scale does not form. This media requires no salt, no back-washing and no regeneration cycle; it's essentially maintenance free.

	Acid Neutralizers			Gravel, Flint & Sand	
67851	Thomasville Lime	50 lb.	58206	Gravel 3/16 x #10	50 lb.
47949	Georgia Marble XO White	50 lb.	112415	Gravel 1/4 x 1/8	50 lb.
51465	Georgia Marble Z-Grade	50 lb.	109252	Gravel 1/2 x 1/4	100 lb.
47947	Corosex   Neutralizing Media	50 lb.	45171	Gravel 1/2 x 1/4 per lb.	per/lb.
51196	Flo-Mag PWT	50 lb.	109264	Gravel 3/16 X #10	100 lb.
	Assorted Filter Media		120476	Gravel 1/8 X 1/16 #20	50 lb.
201976	Greensand Plus	1/2 cu. ft.	48476	Gravel 3/16 x 10 per lb.	per/lb.
9293	Manganese Greensand	1/4 cu. ft.	112415	Fint 1/4 x 1/8	50 lb.
38949	Birm	1 cu. ft.	47776	Fint 1/4 x 1/8 per lb.	per/lb.
45189	Pyrolox	1/2 cu. ft.	224273	Fint 1/4 X 1/8	100 lb.
173154	Filox	1/2 cu. ft.	45386	Garnet #30-40 per lb.	per/lb.
316823	Katalox Light	1 cu. ft.	51459	Garnet #30-40	50 lb.
80764	MTM	1 cu. ft.	51458	Garnet 8-12	50 lb.
228797	Filtersorb FP3	1 liter	47185	Fiter Sand per/lb	per/lb.
51448	Filter-Ag	1 cu. ft.	58204	Fiter Sand .4555	100 lb.
160218	Filter-Ag Plus	1 cu. ft.	40885	Sand #2	100 lb.



# **How to Order**

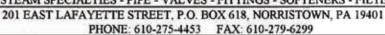
Submit your order online or email info@duffco.com

Be sure to include product numbers descriptions quantities

Don't forget to include your name!

## **DUFF SUPPLY COMPANY**

WATER TREATMENT EQUIPMENT - PUMPS - PLUMBING - HEATING - INDUSTRIAL SUPPLIES - PUMPS STEAM SPECIALTIES - PIPE - VALVES - FITTINGS - SOFTENERS - FILTERS





SOLD TO		SHIP TO:		
YOUR NAM	ME:	PURCHASE ORDER N	NO	
TODAY'S I	DATE:	REQUIRED DATE:		
QTY	FIG. NO.	DESCRIPTION	PRICE/EA	TOTAL



TERMS: NET -  $10^{78}$  OF MONTH FOLLOWING PURCHASE WE WILL PREPAY AND ADD FREIGHT FOR ALL ORDERS SHIPPED UPS OR COMMON CARRIER

Products for Quality Water

All accounts are to be paid in full to Duff Supply Company monthly by the tenth (10th) day of the month following invoice date, a 1% service charge and a 1% interest charge will be made on any balance open at the end of the month following invoice, and in the event that legal action or lien be undertaken, or the service of a collection agency are used to collet this account, the customer shall pay all expenses incurred by Duff Supply Company, such as, but not limited to, costs and collection, legal and lien fees.

QTY	FIG. NO.	DESCRIPTION	PRICE/EA	TOTAL



Thank You for your business!





### **DUFF COMPANY**

201 East Lafayette Street Norristown, PA 19401





Legal Name					
Name in which business is conducted					
Billing Address					
City	State	Zip			
Purchasing Phone	_A/P Phone	Fax			
Principal's Name	****				
City	State	Zip			
Phone (Office)(Cell)		E-mail address			
Website address (If applicable)					
Primary Contact	Title_				
	****				
SHIP	PING ADDRESS - IF D	DIFFERENT			
Shipping Address		Phone			
City	State	Zip			
Tax Exempt Number Exempt Account without certification.	Tax Exempt NumberProvide a copy of Certificate. We CAN NOT set up a Tax				
	****				
	TYPE OF BUSINES	ss			
Hospital Factory (OEM) Fac	tory (Mtnd)	Hotel or Apts Well Drilling Office Building Shopping Center _ Other (Please name)			
Have you been contacted by one of our sales	sman?Name				
If YES, please explain					
Name of person authorized to pick up					
D&B Rating Check one: Corpor	ration Part	nership Individual Proprietor			
If division of another company, name paren	t company and relat	ionship			

### **DUFF COMPANY**

201 East Lafayette Street, Norristown, PA 19401

#### TRADE REFERENCES

Name		Type of business		
Address				
City		State	Zip	
Phone		Fax		
_		****		
Name		Ту!	pe of business	
Address				
			Zip	
Phone		Fax		
		****		
Name		Ту	pe of business	
			Zip	
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		<b>***</b>		
Bank reference_				
•		nt	·	
application is correct that a 1% service ch in the event that leg	ct, that all accounts are to narge and a 1% interest gal action or lien be take	o be paid in full to Duff Company monthly by the charge will be made an any balance open at the	ned hereby agrees that all information supplied in this the tenth day of the month following the invoice date the end of the month following invoice date, and that and to collect this account, the undersigned shall pay all and legal fees.	
Applicant (Name	e of Account)			
Ву		Title		
	ble consideration, herebyns) payments of all bills a		lly guarantee, warrant and promise the full and e applicate in connection with any credit extended to	
Principal	Witness	Principal's Spouse	Witness	
Principal	Witness	Principal's Spouse	Witness	
We routinely fax	invoices to our custor	mers. Please provide a fax number where v PLEASE FAX FORM TO 610-275-676		
*As appropriate, we n	may also require the guara	ntee of a principal and, in some cases, the principal's	s spouse.	
Cradit Limite		For Duff Company Use Only	Contificate Book	
		Date Approved:		