#### NEUTRALIZATION MEDIA



## NEUTRALIZER PLUS

SWT Neutralizer Plus (P/N PH10001) can correct acidic water conditions and render it less corrosive by neutralizing the free carbon dioxide in water. Neutralizer Plus is used most effectively where pH correction is substantial or high flow conditions are in use, it is a highly reactive magnesium oxide. pH correction and media consumption are affected by a number of water chemical variables. Being soluble to acidity, Neutralizer Plus will slowly dissolve and will need to be replenished periodically. Certified to NSF/ANSI/CAN Standard 60.

## **FEATURES**

- · High degree of activity and speed of correction allowing high flow
- · High capacity, less chemical usage

On a per weight basis, magnesium oxide can neutralize five times more acidity than can calcium carbonate. This results in greatly reduced chemical usage for the same pH correction. Please note; under certain low flow conditions, Neutralizer Plus may overcorrect and create a highly basic (high pH) condition.

Under certain hardness conditions, pH correction can cause hardness minerals to precipitate out of solution, resulting in cementing or solidification of the Neutralizer Plus mineral bed. Upflow service is generally recommended with hardness exceeding five grains per gallon. (Always use an in-line filter ahead of an upflow system to prevent plugging of the lower distribution screen.)

As Neutralizer Plus's magnesium oxide neutralizes the water, it will increase hardness and a softener may become necessary after the neutralizing filter. Neutralizer Plus can be effectively combined with Neutralizer to combine the high flow neutralization properties of Neutralizer Plus, along with the slower reacting low flow properties of Neutralizer, reducing potentially high basic properties due to overcorrection.

## Suggested Operating Conditions

Water pH Range	4.5 - 6.0
Bed Depth	24 to 30 inches
Freeboard	$\dots 50\%$ of bed depth minimum
Backwash Rate	10 to 12 gpm per sq.ft.
Service Flow Rate	5-6 gpm/sq. ft.
Maximum Usage	100 mg/L

## Typical Properties

Color	Brownish White
Bulk Density	75 lbs./ cu. ft.
US Standard Mesh Size	6×16
Specific Gravity	3.6 gm/cc
Effective Size	1.4mm
Uniformity Coefficient	1.7
Composition	Mg0 97% minimum

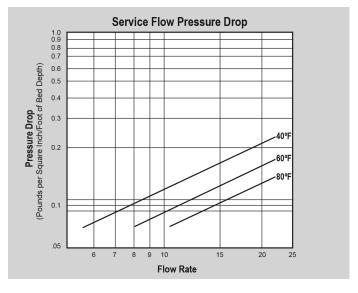
Backwash Bed Expansion- Due to Neutralizer Plus' high density and large particle size, a new bed is difficult to expand, but it is still imperative to backwash in order to keep the bed clean. Over time, as the media is consumed, the particle size will decrease and backwash bed expansion will begin to occur. Backwash Bed Expansion- Due to Neutralizer Plus' high density and large particle size, a new bed is difficult to expand, but it is still imperative to backwash in order to keep the bed clean. Over time, as the media is consumed, the particle size will decrease and backwash bed expansion will begin to occur.



# NEUTRALIZATION MEDIA



## NEUTRALIZER PLUS



Downflow service is generally satisfactory on waters with a hardness of less than five grains/gallon or where it's combined with Neutralizer at least 50-50. Upflow service is generally recommended with hardness exceeding five grains/gal. to prevent cementing of the Neutralizer Plus bed. Use distributors designed for upflow applications. A gravel support bed is recommended.

**PRESSURE DROP** — The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

> This information has been gathered from standard materials and/or test data that is believed to be accurate and reliable. Nothing herein shall be determined to be a warranty or representation expressed or implied with respect to the use of such information or the use of the goods described for any particular purpose alone or in combination with other goods or processes, or that their use does not conflict with existing patent rights. No license is granted to practice any patented invention. It is solely for your consideration, investigation and verification.

