

# NS6L – WATER TREATMENT & FILTRATION

**GIVES YOU SAFE, DELICIOUS DRINKING WATER AT EVERY TAP.**

Naturalsof 6L combines the convenience of Naturalsof's hard water protection with a unique blend of high quality filtration media to provide high quality and delicious drinking water at every tap. The 6L utilizes an automatic backwashing valve to regenerate the filtration media every 21 days. Filtration media used in the 6L is expected to last 5 - 7 years and is easy to replace on site.

## FEATURES

- Naturalsof hard water limescale protection
- No salt or chemicals
- 6 layers of premium filtration media
- Including 2 types of carbon, clinoptilolite, kdf 55
- Reduces chlorine and chloramine
- Automatic backwashing head leaves minimal maintenance
- Improves taste of drinking water



## REQUIREMENTS

- Municipal water supply
- Uninterrupted 120VAC electrical connection
- Drain or outdoor access for backwashing cycle
- Minimum flow rate of 1GPM
- Water temperature range: minimum 40F, maximum 80F
- Water pressure range: minimum 40psi, maximum 75psi
- Do not allow unit to freeze
- NS05 must be installed on any hot water return to water heater

	NS6L
Overall Filter Dimensions	12" x 60"
Average Service Flow Rates	1 to 4.5 GPM
Peak Flow Rates	With NS1 inside = 9 GPM
Pressure Drop @ Average Service Flow Rates	0 to 3.5 PSI
Pressure Drop @ Peak Flow Rates	With NS1 inside = 13 PSI @ 9 GPM
Standard Water Line In And Out Connections	3/4", NPT, Plastic
Pipe Size For A Residential Drain Line	Minimum of 1/2" (13mm).
Water Temperature Range	Minimum 40°F, Maximum 80°F
Water Pressure: Point Of Entry (POE)	Minimum 40 psi, Maximum 75 psi
Water Flow Rates	Water must be supplied to unit at a minimum of 1 GPM

NSF/ANSI  
61 & 372



## ADSORPTION/FILTRATION (NSF/ANSI 42&53)

This process occurs as liquid, gas or dissolved or suspended matter adheres to the surface of, or in the pores of, an adsorbent media. Carbon filters are an example of this type of product.

## CERTIFIED MATERIALS USED IN THE NS6L. DESCRIPTIONS AS FOLLOWS:

### SRI SUPREME GRAVEL PACK #6

Provides base and protection for bottom distributor in filter. NSF/ANSI 61

### GARNET #8 (2.0MM)

When used in combination with the other filter medias, higher flow rates, higher loading, and better filtration is achieved. High hardness reduces attrition and provides for years of reliable service. An excellent support bed for other high density medias. Sediment filtration down to the 10-20 micron range. (the average human hair is about 100 microns in diameter) NSF/ANSI 61

### CLINOPTILOLITE, MESH SIZE 14X30 (0.55MM)

Natural media with a large surface area and microporous structure, which can be used as a highly efficient filter media for the reduction of suspended matter. Viewed under an electron scanning microscope, the granules reveal an angular shape, rough surface and microporous void spaces as small as 3 microns. This creates a surface area over 100 times greater than silica sand. The angularity of the granules and the tapered internal pore spaces allow for reduction of dirt, silt and organic matter suspended in water by bridging, straining and adhesion. The rough surface and internal porosity provide a high surface area for efficient reduction of suspended matter. Utilizing deep bed filtration can typically reduce suspended solids down to the 5 micron or less range. (the average human hair is about 100 microns in diameter) NSF/ANSI 61

### COCONUT SHELL-HIGH ACTIVATED CARBON

Granular activated carbon is designed for reduction of tastes, odors and dissolved organic chemicals from municipal and industrial water supplies. Manufactured from select grades of coconut shell coal to produce a high density, durable granular product capable of withstanding the abrasion and dynamics associated with repeated hydraulic transport, backwashing and mechanical handling. Activation is carefully controlled to produce exceptionally high internal surface area with optimum pore size for the adsorption of a broad range of low molecular weight organic contaminants and oxidizing agents like chlorine and ozone. One of the most common applications for Coconut Shell-High Activated Carbon (CS-HAC) is the reduction of the undesirable tastes and odors present in many chlorinated water supplies. CS-HAC has been successful for many years in the reduction of free chlorine from water supplies. The end product is clean, fresh water with no objectionable taste or odor characteristics. NSF/ANSI 61

### KDF 55 MEDIA

Designed specifically for removing or reducing chlorine and water-soluble heavy metals. Can remove up to 99% of water-soluble lead, mercury, nickel, chromium, and other dissolved metals. Is effective in controlling the buildup of bacteria, algae, and fungi, making it ideal for use in this mixed bed design filtration. NSF/ANSI Standard 42

### HIGH ACTIVATED CARBON (HAC)

Granular activated carbon is designed for reduction of tastes, odors and dissolved organic chemicals from municipal and industrial water supplies. Manufactured from select grades of bituminous coal to produce a high density, durable granular product capable of withstanding the abrasion and dynamics associated with repeated hydraulic transport, backwashing and mechanical handling. Activation is carefully controlled to produce exceptionally high internal surface area with optimum pore size for the absorption of a broad range of high and low molecular weight organic contaminants. Primary use in the municipal application is the reduction of chloramine (chlorine and ammonia) and the disinfection byproducts caused by chlorination. These include chloroform and other trihalomethanes (THMs). NSF/ANSI 61

### CATALYTIC ANTI SCALE UNIT

As water passes through the internally mounted NaturalSof it is subjected to a turbulent interaction with a non-sacrificial, lead-free, WQA NSF 61 & 372\* certified catalytic core made of a special alloy. This alloy core has a unique surface that causes a transformation to take place as water flows across it. The dissimilar metals and the water create a battery effect generating a very small electrical charge. This electric charge causes a percentage of the calcium and bicarbonate in the water to come out of solution and into suspension forming calcium carbonate in the aragonite state. The microscopic aragonite crystal formations remain suspended in the water and pass harmlessly through the system. As a result there is insufficient calcium remaining in solution to form scale in your pipework and appliances. Any pre-existing scale is simply washed away over time. NSF/ANSI 61, 372



The Oak Ridge National Laboratory report concluded:

"The technology has demonstrated its effectiveness in this study, and should be considered for adoption by GSA facilities that are experiencing scaling issues in water heating systems. Most larger GSA facilities use cooling towers and hydronic heating systems to meet HVAC needs. These also would benefit from this technology."

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