



# SuperTRAP™

## High Performance Zeolite Filter Media

### Advantages

CASCADIAN® SuperTRAP™ filter media offers advantages over conventional sand, sand & anthracite, or multimedia filters.

Advantages over conventional media include:

- Lower pressure loss for a given flow rate
- Higher solids loading capacity
- Reduced backwashing frequency
- Enhanced filtration performance
- Reduces load on downstream equipment
- Light weight reduces shipping costs
- Single media replaces multimedia
- NSF standard 61 listed

CASCADIAN® SuperTRAP™ is a high quality, granular, zeolite filter media. It is produced from a unique mineral deposit having high surface area and porosity. The surface structure of SuperTRAP™ features microscopic mineral projections that allow particulate matter to penetrate deeply into the bed. These properties make SuperTRAP™ an ideal filtration media achieving higher solids loading & superior filtration performance. Higher service flow rates reduce new equipment costs and provide expansion opportunities for existing equipment. Single media solution provides for easy re-bedding and reduced inventory.

### SuperTRAP™ vs. conventional media

Filter Media	Nominal Rating	Loading Capacity
Sand	20μ	1.0 X
Sand & Anthracite	15μ	1.4 X
Multimedia	12μ	1.6 X
<b>SuperTRAP™</b>	<b>5μ</b>	<b>2.8 X</b>

### Uses Include

- Removing oxidized metals such as iron and manganese
- Removing turbidity (suspended solids) from lake, river, pond or stored water
- Cooling towers and makeup water
- As a pre filter for;
  - Granular activated carbon filters
  - Reverse Osmosis systems
  - Softeners and other ion exchange systems
  - Ultraviolet systems
- As a post filter for;
  - Ozone systems
  - Chlorination systems
  - Flocculation / coagulation systems
- Increasing capacity of existing filter equipment
- Replacement of existing pressure or gravity filter media

### Physical Properties

- Color: Light green
- Bulk Density: ±55 lbs./ft<sup>3</sup>
- Surface Area: ±25 m<sup>2</sup>/gr
- Specific Gravity: 2.2 gr/cm<sup>3</sup>
- Maximum Water Retention: ±55% Wt.
- Mesh Size: 14 x 40
- Uniform Coefficient: 1.9
- Hardness: 4 (Mohs scale)

### Conditions for Operation

- Bed depth: 36 – 48 inches
- Freeboard: 50% of bed depth
- Service flow rate: 12 – 20 gpm/ft<sup>2</sup>
- Backwash flow rate: 16 – 18 gpm/ft<sup>2</sup>
- Backwash bed expansion 30 – 40%

### Ordering Information

Part Number	Description
CSM-SUPERTRAP	SuperTRAP™ high performance zeolite filter media (55 lb., 1 ft <sup>3</sup> bag)
CSM-SUPERTRAP-SS	SuperTRAP™ high performance zeolite filter media (2200 lb., 40 ft <sup>3</sup> super sack)

The information and recommendations in this publication are based on data we believe to be reliable. They are offered in good faith, but do not imply any warranty or performance guarantee, as conditions and methods of use of our products are beyond our control. As such, O<sub>3</sub> Water Systems makes no express or implied warranties of any kind with respect to this product, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. We recommend that the user determine whether the products and the information given are appropriate, and the suitability and performance of our products are appropriate, by testing with its own equipment. Specifications are subject to change without notice. O<sub>3</sub> Water Systems will not be liable under any circumstance for consequential or incidental damages, including but not limited to, lost profits resulting from the use of our products.

CASCADIAN® Solutions™ / O3 Water Systems, Inc.

•Phone 1-360-794-9511 •Fax 1-360-794-0856

17700 147<sup>th</sup> St SE - Suite F

Monroe WA. 98272 USA

Web address: <http://www.cascadianwater.com>

**CASCADIAN® SuperTRAP™ Vessel Loading Information**

Vessel Diameter Inches (cm)	Media Quantity CSM-SUPERTRAP Ft <sup>3</sup> (m <sup>3</sup> )	Under Bed FG1 Lbs (kg)	Service Flow Rate gpm (lpm)	Backwash Flow Rate gpm (lpm)
9 (22.9)	1 (.028)	12 (5.4)	5-9 (18-34)	5 (19)
10 (25.4)	1.5 (.042)	15 (6.8)	7-10 (26-37)	7 (26)
12 (30.5)	2 (.056)	25 (11.3)	9-15 (34-57)	10 (38)
13 (33.0)	2.5 (.07)	30 (13.6)	11-18 (42-68)	12 (45)
14 (35.6)	3 (.085)	40 (18.1)	13-21 (49-80)	15 (57)
16 (40.6)	4 (.11)	55 (24.9)	17-28 (64-106)	20 (76)
18 (45.7)	5 (.14)	80 (36.2)	20-35 (76-132)	25 (95)
21 (53.3)	7 (.17)	100 (45.2)	29-48 (109-181)	35 (132)
24 (61.0)	8 (.22)	200 (90.7)	38-62 (144-235)	40 (151)
30 (76.2)	10 (.28)	300 (136.1)	59-98 (223-371)	60 (227)
36 (91.4)	20 (.56)	500 (226.8)	85-140 (322-530)	85 (322)
42 (106.7)	30 (.85)	700 (317.5)	115-190 (435-719)	110 (416)
48 (121.9)	40 (1.13)	900 (408.2)	150-250 (568-946)	150 (568)

**CASCADIAN® SuperTRAP™ vs. Multimedia - 24" Diameter Vessel**

	<b>SuperTRAP™</b>	<b>Multimedia</b>
Max Service Flow	63 gpm	47 gpm
Backwash Required	40 gpm	40 gpm
Filter Performance	< 5 micron	12 - 15 micron
Loading Capacity	2X	1X
Media Shipping Weight	640 lbs.	945 lbs.

CASCADIAN® SuperTRAP™ media simplifies filter design, installation and performance while costing about 33% less to ship than multimedia.

