## 3M<sup>™</sup> Water Filtration Products

SPEC# \_\_\_\_\_\_ QUANTITY \_\_\_\_\_



## models: ICE190-S/ICE195-S

3M Models ICE190-S and ICE195-S single cartridge water filtration systems help provide consistent high quality water for commercial ice by reducing the effects of particulate, chlorine taste and odor and scale at flow rates up to 5 gpm (18.9 lpm). Built-in scale inhibition reduces the ability of calcium and magnesium to precipitate on the evaporator plates as hard scale.

- **ICE190-S** combines chlorine taste and odor reduction with cyst, bacteria<sup>1</sup> and particulate reduction, while reducing the effects of chlorine corrosion and scale for up to 54,000 gallons (204,412 liters).
- **ICE195-S** combines chlorine taste and odor reduction with particulate reduction from higher turbidity water, while reducing the effects of chlorine corrosion and scale for up to 54,000 gallons (204,412 liters).

### **PRODUCT BENEFITS**

- Effectively reduces particulate and chlorine taste and odor for better equipment protection and clearer, great tasting ice.
- Revolutionary Integrated Membrane Pre-Activated Carbon Technology ("IMPACT") dual-zone media cartridge construction combines a membrane in series with premium activated carbon to provide superior throughput and cartridge life.
- Built-in bacteria inhibitor intended to reduce fouling of media (HF90-S replacement cartridge).
- Certified by NSF to Standard 53 for cyst reduction (HF90-S replacement cartridge).
- NSF Standard 42 and/or FDA CFR-21 compliant materials.
- Reduction of up to 99.99% of common water-borne heterotrophic bacteria by membrane filtration as tested by 3M Purification Inc. (HF90-S replacement cartridge).
- Built-in scale inhibitor reduces lime scale build-up on evaporator plates as tested by 3M Purification Inc.
- Sanitary Quick Change (SQC) encapsulated cartridge design allows for fast and easy cartridge change-outs with a 1/4 turn.
- 1/2" FNPT horizontal inlet and outlet ports allow direct or easily adaptable connections to existing plumbing lines.

### **PRODUCT SPECIFICATIONS**

Model Number	Part Number	Reduction Claims	Nominal Micron Rating	Cap	acity	Service Flow Rate	Application	Replacement Cartridge	Sizing
ICE190-S	56164-03	Cyst, Bacteria <sup>1</sup> , Particulate, Chlorine Taste and Odor, Scale <sup>2</sup>	0.2 <sup>3</sup>	54,000 gallons (204,412 liters		5 gpm (18.9 lpm)	Most Standard Water	HF90-S: 56135-05	Low Flow Cubers to 1,450 lbs. (658 kg) High Flow Cubers to 1,000 lbs. (454 kg) Flakers to 2,400 lbs. (1,089 kg)
ICE195-S	56164-04	Particulate, Chlorine Taste and Odor, Scale <sup>2</sup>	3.0	54,000 gallons (204,412 liters)		5 gpm (18.9 lpm)	Higher Turbidity Water	HF95-S: 56135-09	Low Flow Cubers to 1,450 lbs. (658 kg) High Flow Cubers to 1,000 lbs. (454 kg) Flakers to 2,400 lbs. (1,089 kg)
					<sup>1</sup> As tested with either E.Coli ATCC (11229) or Pseudomonas (B) diminuta ATCC (19146) <sup>2</sup> Tested and verified by manufacturer's laboratory <sup>3</sup> NSF Certified for Particulate, Class I				



application: IC

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E STIET (E5 Cm) MININUM REDURED FOR TOTA REMOVAL

 $\bigtriangleup$  WARNING: To reduce the risk associated with the ingestion of contaminants:

• Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. EPA Establishment #070595-CT-001

3M Purification Inc. Incorporated recommends regularly scheduled maintenance and replacement of the filter cartridge(s) in order for the product to perform as advertised/sold. 3M Purification Inc. shall not be liable for system failures due to improper maintenance.

### PHYSICAL SPECIFICATIONS

- System includes a head assembly with pressure gauge, inlet water shut-off valve assembly, mounting bracket and a single cartridge filter.
- Inlet and outlet plumbing connections are 1/2" FNPT.
- Filter cartridges are o-ring seal type.
- System maximum operating pressure of 125 psi (862 kPa) and operating temperature of 100°F (37.8°C).
- Recommended service flow rate is up to 5 gpm (18.9 lpm).
- Filter cartridges incorporate a bacteriostatic carbon block filtration medium (HF90-S replacement cartridge) and scale inhibitor.
- System materials are NSF Standard 42 and/or FDA CFR-21 compliant.
- Cartridges are sanitary in design, requiring no contact with the filter media during cartridge change-out.
- Filter cartridges require no pre-activation.
- NSF Performance Data Sheet (PDS) is included.
- Shipping weight: 5.8 lbs. (2.6 kg) per case.
- Operating weight: 11 lbs. (5 kg) per case.
- Case quantity: 1.

### **IMPORTANT: INSTALLATION TIPS**

These installation tips are for informational purposes only and are not intended to be used as actual installation instructions. CAUTION: To reduce the risk associated with property damage due to water leakage:

- Read and follow Use Instructions before installation and use of this system.
- Installation and use MUST comply with all state and local plumbing codes.
- Protect from freezing, remove filter cartridge when temperatures are expected to drop below 40°F (4.4°C).
- Do not install on hot water supply lines. The maximum operating water temperature of this filter system is 100°F (37.8°C).
- **Do not install** if water pressure exceeds 125 psi (862 kPa). If your water pressure exceeds 80 psi (552 kPa), you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure.
- Do not install where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.
- The disposable filter cartridge **MUST** be replaced every 12 months, at the rated capacity or if a noticeable reduction in flow rate occurs.

#### LIMITED WARRANTY

3M Purification Inc. warrants ICE190-S/ICE195-S only to be free from defects in material and workmanship for five (5) years from the date of purchase. The disposable filter cartridge is warranted from defects in material and workmanship for a period of one (1) year from the date of purchase. This warranty does not cover failures resulting from abuse, misuse, alterations or damage not caused by 3M Purification inc. or failure to follow installation and use instructions. No warranty is given as to the service life of any filter cartridge or membrane as it will vary with local water conditions and consumption. **3M PURIFICATION INC. MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY <b>IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOMER OR USAGE OF TRADE**. If the Product fails to satisfy this Limited Warranty during the warranty period, 3M Purification Inc., at its option, will replace the Product purchase price. This warranty loces not cover labor. **The remedy stated in this paragraph is Customer's sole remedy and 3M Purification Inc.'s exclusive obligation. For additional information, see the entire Limited Warranty located in the product Installation and Operation Instruction Manual.** 

Limitation of Liability: 3M Purification Inc. will not be liable for any loss or damage arising from this 3M Purification Inc. product, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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