



## FREQUENTLY ASKED QUESTIONS

### 1. What is Wateropolis Cerapure-AC?

Cerapure-AC is a dark & gold colored catalytic media used to remove chlorine, chloramine, peroxide and all other oxidation chemicals from water supplies. It simultaneously provides > 99% removal of 10-micron particles.

### 2. What is Cerapure-AC media made from?

The media is made from an extremely hard ceramic core substrate coated with lead-free 50/50 copper-zinc alloy and activated carbon. The combination of alloy and carbon acts as an oxidant reducer through multiple reduction pathways. The copper component of the alloy is bacteriostatic and has been shown to reduce bacterial content of a static filter rather than grow bacteria the way granular activated carbon does. The alloy itself is reactive and increases the kinetics of the reduction process. Carbon is used to reduce both the weight of Cerapure

### 3. Can Cerapure-AC be used in existing filters designed with other media in the market?

Yes. Wateropolis Cerapure-AC can be used as a direct replacement media for all existing pressure filters. Cerapure-AC will reduce all influent oxidizers to level below GAC in comparable conditions.

### 4. What are common applications for Cerapure-AC?

Common uses for Wateropolis Cerapure-AC include potable water treatment (POE & POU) and pre-treatment for polyamide membrane plants.

### 5. What is the advantage of Cerapure-AC in drinking water applications?

The extremely reactive nature of the metals and carbon combination makes the material highly effective. It simultaneously provides exceptional 5-micron particle filtration and will not grow biological content during operations or periods of inactivity.

### 6. What is the typical operating life of Cerapure-AC?

Typical operating life of the media is 5 - 7 years.

### 7. What is the service flow rate and backwash rate of Cerapure-AC?

Wateropolis Cerapure-AC has a filter loading rate of 8 – 10 gpm/ft<sup>2</sup> and a backwash rate of 10-12 gpm/ft<sup>2</sup>.

### 8. Is any pre-conditioning of feed water required?

No preconditioning of influent is required for operations.

### 9. What is the one-time installation pre-conditioning process?

New material needs so soak for 4 hours and more is better (24 hours is ideal) to saturate the surface of the media. An initial backwash is required at 10 gpm/ft<sup>2</sup> at 55°F (13°C) for up to 20 minutes (40% expansion).to remove any fines.

### 10. Can we do hot water sanitization of Wateropolis Cerapure-AC with water at 212°F (100°C)?

There is no reason to do any sanitization or steaming of material, the metal alloy will mitigate biological growth of in-service, static or drained filters.

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## CONTACT US

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# CERAPURE-AC



## 11. Is Wateropolis Cerapure-AC NSF approved?

Yes, Wateropolis Cerapure-MA is Certified to the NSF/ANSI-61 Standard.

## 12. Does Cerapure-AC help remove H<sub>2</sub>S in the feed water?

Yes, Cerapure-AC is very effective in removing H<sub>2</sub>S from incoming water. The reaction with the copper component creates Copper sulfide which is trapped in the filter until backwashed out. The use of oxidant chemicals will also convert H<sub>2</sub>S to sulfur for filtration.

## 13. What kind of filtration system is needed?

Systems using either vertical or horizontal pressure filtration can use Cerapure-AC.

## 14. Would high differential pressure or high flow rate destroy Wateropolis Cerapure-AC?

No, Cerapure-AC is very durable and will not break down with high differential pressure and flow rates. We recommend a maximum differential pressure across the bed of 30 psi (2.1 Kg/cm<sup>2</sup>).

## 15. Are there basic recommended operating conditions?

No maximum operating temperature,

Backwash characteristics 10 gpm/ft<sup>2</sup> minimum– 12 gpm/ft<sup>2</sup> recommended. (24.4 m/hr - 29.3 m/hr) depending on feed water temperature.

Service flow rate 8-10 gpm/ft<sup>2</sup> (19.6 – 24.4 m/hr)

Minimum bed depth 10” (254mm) to 24” (610 mm) optimal

## 16. What are some other characteristics of the product?

Loose bulk density 86 lbs per cubic foot

Porosity 0.47 (approximately)

Screen grade (dry) 50 x 60 mesh

Uniformity coefficient <1.40

## 17. How is Cerapure-AC packaged?

The media is shipped in 43 lb. (20 kg.) plastic lined paper bags or in 20 ft<sup>3</sup> super sacs.

*\*Patent pending*



**ABOUT WATEROPOLIS** Wateropolis Inc. is dedicated to identifying and developing new and innovative technologies for water and wastewater treatment. We look for simple, logical answers to complex questions.