

# ***Nutripure***<sup>®</sup>

ULTRAVIOLET SANITARY CONDITIONERS



*Model 2B-SC, 3B-SC*



*Model 4B-ASC, 5B-ASC*



*Model 6B-ASC*

SINCE 1963

**ATLANTIC** **AU** **ULTRAVIOLET**  
CORPORATION<sup>®</sup>



## ABOUT US

Since 1963, Atlantic Ultraviolet Corporation has pioneered the discovery and development of beneficial uses of ultraviolet energy. Over the years these efforts have led to the development of valuable, cost effective and environmentally sound techniques and products now known and respected throughout the world.

Atlantic Ultraviolet's application specialists assist customers in the selection of germicidal lamps and equipment. Their specialized knowledge is a valuable resource in formulating effective and cost-conscious ultraviolet solutions. Extensive inventories and a dedicated staff enable Atlantic Ultraviolet to fulfill its commitment to provide fast deliveries and responsive customer service.



## GERMICIDAL ULTRAVIOLET

Ultraviolet is a unique and rapid method of disinfection utilizing germicidal ultraviolet lamps that produce short-wave radiation at 254 nanometers (nm) that is lethal to bacteria, virus and other microorganisms.

An ever growing range of industries and consumer applications have found ultraviolet to be the ideal solution for their air treatment needs.

Atlantic Ultraviolet equipment and systems are manufactured in the USA.



**Model 2B-SC, 3B-SC**



**Model 4B-ASC, 5B-ASC**



**Model  
6B-ASC**



## ADVANTAGES

### **Economical**

System requires very little power to operate.

### **Safe**

No risk of over-exposure.

### **Fast**

Disinfects air in seconds.

### **Automatic**

Continuous disinfection without special attention.

### **Durable**

Polished Stainless Steel Cabinet.

### **Versatile**

Numerous models available to handle various configurations.

### **Low Maintenance**

Periodic lamp replacement and filter cleaning or replacement is required.

## PRINCIPLE OF OPERATION

The **Nutripure**® has been carefully conceived to provide adequate germicidal ultraviolet exposure for air disinfection. The treated air is used in the head space of liquid storage tanks helping to prevent condensation. The dosage, as it applies to ultraviolet disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air is exposed. Our UV application specialists would be happy to perform the necessary calculations to ensure the sanitary conditioner we provide is appropriate for your particular application.

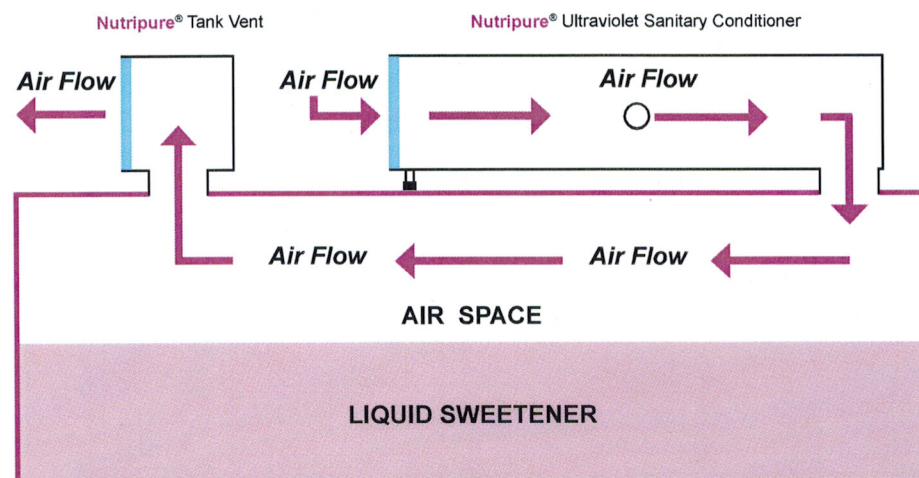


Figure 1 - **Nutripure**® Ultraviolet Sanitary Conditioner mounted on a liquid sugar tank

The operation of the **Nutripure**® is as follows:

1. Air is drawn into the **Nutripure**® Ultraviolet Sanitary Conditioner through the electrostatic filter.
2. The air is forced into the ultraviolet exposure chamber where it is irradiated by germicidal ultraviolet light (lamp quantity varies per model). These special lamps generate high levels of germicidal ultraviolet radiation lethal to infectious microorganisms such as bacteria, molds and viruses, and once exposed, they are inactivated.
3. Observation Port/Sight Glass provides positive indication of germicidal lamp operation.
4. On models with a HEPA Absolute filter, the irradiated air is then forced through this additional filter which removes more than 99.97% of particles as small as 0.3 microns.
5. Circulation of purified filtered air within the tank head space reduces condensation which can be detrimental to the liquid integrity.
6. Air is exhausted out of the tank through a filtered tank vent.



## SPECIAL FEATURES

### Nutripure® 2B-SC and 3B-SC Ultraviolet Sanitary Conditioners

**Nutripure®** Ultraviolet Sanitary Conditioners have long been used commercially to ventilate the air space above the liquid in storage tanks. The purpose of this equipment is to provide a sterile condition in the tank head space, defeat contamination from airborne sources and lower condensation levels which can dilute the tank contents. When diluted, some liquids have a strong tendency to promote the growth of bacteria and mold on the liquid surface.

The **Nutripure®** Ultraviolet Sanitary Conditioner ensures that bacteria-free air is used to provide a sanitary environment inside the tank. The **Nutripure®** Ultraviolet Sanitary Conditioner forces bacteria-free air into the air space above the liquid in the storage tank and the tank vent provides an outlet for this air, while at the same time preventing contaminants, insects or debris from entering the storage tank.

**Nutripure®** Ultraviolet Sanitary Conditioners utilize **STER-L-RAY®** germicidal lamps which are completely enclosed within a stainless steel exposure chamber and are safe for use in storage tank applications.



#### **STER-L-RAY® Instant Start Germicidal Lamp(s)**

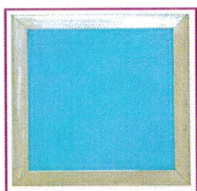
**STER-L-RAY®** Germicidal Lamp(s) are instant starting and provide the utmost in quality, sustained output and longevity. **ArmorLite™ Safety Shield** protective coating is applied to all **STER-L-RAY®** Germicidal Lamps installed in **Nutripure®** Ultraviolet Sanitary Conditioners to ensure protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps.

#### **Steadfast™ Lampholders**

Set includes a stationary and a spring-loaded, telescopic holder that grasps a single pin lamp securely. The spring-loaded feature on one end facilitates convenient, quick and easy lamp changes.

#### **Interlock Safety Switch**

The interlock safety switch is a standard feature that disconnects power to the sanitary conditioner when the access panel is removed for lamp or filter replacement.



#### **Particulate Filter**

Washable Electrostatic Filter.

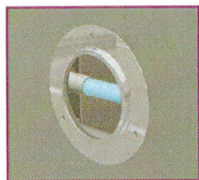


**Model 2B-SC, 3B-SC**

(see page 10 for Optional Accessories)

#### **Polished Reflector**

Interior surface is polished aluminum providing a highly reflective surface to maximize ultraviolet intensity within the chamber.



#### **Observation Port/Sight Glass Assembly**

A Sight Glass Assembly allows for a **safe** visual inspection of the operation of the lamp(s).

#### **Stainless Steel Enclosure**

The sanitary conditioner is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish.