



# WINSTON / ROYAL GUARD CORPORATION

## Carbon Filter Canisters

### WCFL-1122 Series with Activated Carbon

FOR: TYPE 61V-C  
LIQUID FILTERS



**Activated Carbon Granules**

**Radial Flow Canister  
with perforated exterior**



The WCFL-1122 series carbon canisters with activated virgin carbon are furnished in the type 61V-C Vertical Liquid Filter to remove dissolved hydrocarbons and other impurities from amine and glycol processes for the prevention of foaming and reduction of corrosion. The impurities are removed as they come into contact with the activated carbon and are adsorbed onto the exterior and interior porous surfaces of the carbon particles. The “activated” carbon has been processed typically by exposure to high temperature steam to open pores in each carbon granule creating many times the original surface area. The impurities do not “absorb”, or assimilate into the carbon, but rather they “adsorb”, or accumulate on the carbon’s external surfaces.

The galvanized steel canister has a perforated exterior housing and interior core allowing for a radial flow through the carbon media. The flow exits through a 2” diameter opening in the bottom of the canister. Heavy wire lifting handles are provided in the top of the canister which can be folded flat after installation into the filter vessel. To aid in retention of the carbon media, a cotton bag is placed into the canister prior to filling. The canisters may be stacked two or three high. Vertical flow canisters are also available.

#### **OPERATING SPECIFICATIONS:**

- Recommended flow rate: 1.5 GPM per canister.
- Radial flow is outside to inside.
- Recommended maximum operating temperature is 150° F. for best retention of impurities. Higher temperatures may provide less retention.
- Gaskets are Buna-N for temperatures up to 250° F.
- Carbon canisters should not develop a significant increase in differential pressure during use when provided with proper upstream particulate filtration.



# Carbon Filter Canisters

## WCFL-1122 Series with Activated Carbon

### Activated Carbon Granules



#### CARBON:

- Carbon: activated virgin carbon
- Type: coal
- Mesh size of carbon: 8 x 30
- Molasses number: 400 (typ.)
- Iodine number: 1000 mg/g (min.)
- Ash, total: 12%

#### CANISTER:

- Canister: galvanized steel
- Gaskets: Buna-N
- Liner: cotton
- Dimensions of canister: 11" diameter x 22" tall (nom.)
- Interior core diameter: 2"



**Mesh** size refers to a measurement of the carbon granule. In this case, 85% of the granules will fall through an 8 x 8 US wire mesh sieve and 95% will be retained on a 30 x 30 US wire mesh sieve placed below.

**Molasses** number is derived from the decolorization from molasses in solution, and refers to the measure of the content of mesopores (pores having diameters 2 - 50 nm) in the carbon granule after it has been activated compared to a standard carbon granule. The higher the number, the larger the molecule captured.

**Iodine** number is based on the amount of iodine adsorbed in testing, and is an indicator as to the porosity, or the content of micropores (pores having diameters  $\leq 2$  nm) in the carbon granule after it has been activated. The higher the number, the more activation in the carbon particle.

**Ash** is the measurement of oxides in the carbon granule expressed as a percentage. The lower the percentage, the higher the carbon portion of the granule and its activity.

Specifications are subject to change without notice. 7-6-2018

**WINSTON / ROYAL GUARD CORPORATION**

P. O. Box 1145 • White Oak, Texas 75693 USA

Phone (800) 527-8465 • (903) 757-7341 • Fax (903) 759-6986

Winston-RoyalGuard.com • e-mail: sales@winston-royalguard.com

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