

PRODUCT SPECIFICATION 4

PURAFIL® ESD CSO™ MEDIA

PURAFIL



PURAFIL ESD CSO MEDIA, has been proven to offer a high removal capacity for chlorine and sulfur dioxide gas. Third-party laboratory testing demonstrates CSO's ability to remove chlorine and sulfur dioxide gas and is recommended for prevention of toxic gas releases.

MEDIA SPECIFICATION

CSO™, an activated alumina-based media shall consist of manufactured, generally spherical, porous pellets measuring 1/8" in diameter. Pellets shall be formed from a combination of powdered activated carbon, alumina and other binders, suitably impregnated with caustic chemicals to enhance the capacity for removal of chlorine and sulfur dioxide. Impregnants shall be applied during pellet formation, such that the impregnant is uniformly distributed throughout the pellet volume.

THE CHEMISORPTIVE PROCESS

The chemisorptive process shall remove contaminant gases by means of adsorption, absorption, and chemical reaction. Gases shall be trapped within the pellet where an irreversible chemical reaction changes the gases into harmless solids, eliminating the possibility of desorption.

REMOVAL CAPACITY

CSO™ media shall meet the following removal capacities:

- Sulfur Dioxide: 10% minimum by weight
- Chlorine: 10% minimum by weight

For example, 100 pounds (45.36 kg) of CSO Media will remove a minimum of 10 pounds (4.54 kg) of chlorine by weight.

PHYSICAL PROPERTIES

- Moisture Content: 35% Maximum
- Crush Strength: 35% - 70% Maximum
- Abrasion: 4.5% Maximum
- Bulk Density: 45 lbs/ft³ (0.72 g/cc) ±5%
- Nominal Pellet Diameter: 1/8" (3.2 mm)

APPLICATIONS

Purafil ESD's CSO™ Media is recommended for emergency removal of chlorine and sulfur dioxide gas from an accidentally discharged storage cylinder. Scrubber capacities range from 150 pounds to one ton and greater.

ADVANTAGES

- Landfill disposable
- New and spent media is non-toxic
- UL Classified Class 2

APPLICATION GUIDELINES

CSO™ Media shall perform effectively under the following conditions and guidelines:

- Temperature: 25° F to 200° F (-3° C to 93° C)
- Humidity: 10 - 95% RH
- Media Performance: CSO™ Media shall be designed for 99.5% min. removal efficiency in Purafil systems.
- Media Life: Regular media samples of CSO™ Media shall be taken for projecting remaining media life, providing scheduled maintenance, and ensuring performance.

DISPOSAL REQUIREMENTS

Spent CSO™ Media should be disposed of according to local, state and federal guidelines.