

# PRODUCT SPECIFICATION

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## ODORMIX™ SP MEDIA




**ODORMIX SP MEDIA** demonstrate a higher working capacity for broad-spectrum oxidation of contaminants in actual field conditions, where multiple gas challenges are present. The Purafil SP Series has been specially engineered to contain more permanganate (the active ingredient) for increased removal capacity, allowing the media to remain more available for removal of target gases. Purafil ESD's Odormix™ SP (patent-pending) Media offers broad spectrum removal of odorous gases related to sewerage treatment operations.



ODORMIX SP MEDIA

### MEDIA SPECIFICATION

Purafil ESD's Odormix™ SP Media shall consist of an equal mix (by volume) of Purafil ESD's Odoroxidant™ SP Media and Odorkol™ Media.

Odoroxidant™ SP Media shall be manufactured of generally spherical, porous pellets formed from a combination of powdered activated alumina and other binders, suitably impregnated with sodium permanganate to provide optimum adsorption, absorption and oxidation of a wide variety of gaseous contaminants. The sodium permanganate shall be applied during pellet formation, such that the impregnant is uniformly distributed throughout the pellet volume and is totally available for reaction. The Odorkol™ Media shall be a premium grade, activated carbon with a high surface area available for adsorption.

### DISPOSAL REQUIREMENTS

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

### ADVANTAGES

- Landfill disposable
- UL Classified Class 1
- Medias are pre-mixed at Purafil's factory
- Substitutes for a two-pass media system
- New and spent media is non-toxic

### PHYSICAL PROPERTIES

**ODORMIX™ SP MEDIA BULK DENSITY:** 40 lbs/ft<sup>3</sup> (0.64 g/cc) ±5%.

Odoroxidant™ SP Media shall have the following physical properties:

- **MOISTURE CONTENT:** 35% Maximum
- **CRUSH STRENGTH:** 35% - 70%
- **ABRASION:** 4.5% Maximum
- **BULK DENSITY:** 50 lbs/ft<sup>3</sup> (0.8 g/cc) ±5%
- **NOMINAL PELLET DIAMETER:** 1/16" - 1/8" (1.5 mm - 3.2 mm)
- **SODIUM PERMANGANATE CONTENT:** 12% Min.

Odorkol™ Media shall have the following physical properties:

- **MOISTURE CONTENT:** 2%
- **CTC:** 60% Minimum
- **BASE MATERIAL:** Activated Carbon
- **BULK DENSITY:** 30 lbs/ft<sup>3</sup> (0.48 g/cc) ±5%
- **PELLET DIAMETER:** 4mm

### APPLICATIONS

Purafil ESD's Odormix™ SP Media is designed for broad spectrum removal of odorous gases, including mercaptans, hydrocarbons, hydrogen sulfide and sulfur dioxide. Odormix™ SP Media is recommended when space within Purafil ESD's multi-stage scrubber is limited; in this application, Odormix™ SP substitutes for two media passes. Odormix™ SP is also recommended as a polishing media.

### APPLICATION GUIDELINES

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

- **TEMPERATURE:** -4°F to 125°F (-20°C to 51°C)
- **HUMIDITY:** 10 - 95% RH
- **AIRFLOW:** Odormix™ SP Media shall be effective in Purafil ESD systems, including the Drum Scrubber with airflows from 100 to 1,000 CFM (170 to 1699 m<sup>3</sup>/hr), Tub Scrubber with airflows from 500 to 6,000 CFM (850 to 10,194 m<sup>3</sup>/hr) and Deep Bed Scrubber with airflows from 600 to 8,000 CFM (1,020 to 13,592 m<sup>3</sup>/hr). Odormix™ SP Media shall also be effective in Vessel Scrubbers with airflows from 8,000 to 20,000 cfm (13,592 to 33,980 m<sup>3</sup>/hr) and in passive Mole Manhole Scrubbers.