PRODUCT SPECIFICATION 4

PURAFIL® SP BLEND MEDIA

PURAFIL SP BLEND MEDIA (a blend of Purafil® SP Media and Purakol® 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 SP BLEND MEDIA

MEDIA SPECIFICATION

Purafil® SP Blend Media (patent-pending) shall consist of an equal mix (by volume) of Purafil® SP Media and Purakol® activated carbon media. The Purafil® SP Media shall be manufactured, 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 Purakol® Media shall be an activated carbon for the control of hydrocarbons with a high surface area available for adsorption.

THE CHEMISORPTIVE PROCESS

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

REMOVAL CAPACITY

Purafil® SP Blend 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.

Purakol® media is a premium-grade activated carbon and is proven to be highly effective at removing hydrocarbons and other high molecular weight contaminants.

PHYSICAL PROPERTIES

All Purafil media are submitted to quality control tests before shipping to ensure uniformity of the following attributes.

PURAFIL® SP BLEND MEDIA

- **BULK DENSITY:** 40 lbs/ft³ (0.64 g/cc) ±5%

PURAFIL® SP MEDIA

- **MOISTURE CONTENT:** 35% Maximum
- **CRUSH STRENGTH:** 35% - 70%
- **ABRASION:** 4.5% Maximum
- **BULK DENSITY:** 50 lbs/ft³ (0.8 g/cc) ±5%
- **NOMINAL PELLET DIAMETER:** 1/8" (3.175mm)
- **SODIUM PERMANGANATE CONTENT:** 12% Min.

PURAKOL® MEDIA

- **MOISTURE CONTENT:** 2%
- **CTC:** 60%
- **BASE MATERIAL:** Activated Carbon
- **BULK DENSITY:** 30 lbs/ft³ (0.48 g/cc) ±5%
- **NOMINAL PELLET DIAMETER:** 4mm

APPLICATION GUIDELINES

Purafil® SP Blend 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:** Purafil® SP Blend Media shall be effective in industrial systems with airflows ranging from less than 25 CFM (42.5 m³/hr) to over 100,000 CFM (169,920 m³/hr) and with velocities from 60 FPM to 500 FPM (0.30 to 2.54 m/s).
- **MEDIA PERFORMANCE:** Purafil® SP Blend Media shall be designed for 99.5% min. removal efficiency in Purafil systems.
- **MEDIA LIFE:** Regular media samples of Purafil® SP Blend Media shall be taken for projecting remaining media life, providing scheduled maintenance, and ensuring performance.

ADDITIONAL INFORMATION ON BACK

2654 Weaver Way Doraville, Georgia, 30340, U.S.A. tel: (770) 662-8545 (800)-222-6367 www.purafil.com

PURAFIL® SP BLEND MEDIA

ADVANTAGES

- UL Classified Class 1
- Simple media replacement
- Media are factory mixed
- Use in place of a two-pass media system
- Effective against a broad range of contaminant gases
- Media life analysis projects remaining media life for proper maintenance and optimum media performance

TARGET CONTAMINANTS

- Hydrocarbons
- VOCs
- Oxides of sulfur (SOx)
- Formaldehyde
- Nitric oxides (NOx)
- Hydrogen sulfide
- Lower molecular weight aldehydes and organic acids

INSTALLATION & DISPOSAL REQUIREMENTS

- **INSTALLATION:** Installers shall use dust masks, safety goggles, and rubber gloves.
- **DISPOSAL:** Spent Purafil® SP Blend Media should be disposed of according to local, state and federal guidelines.

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