



ProGuard 400 Media

ProGuard 400 is specifically designed to remove chlorine contaminants from air streams. It is routinely used in HVAC systems in chemical plants, drinking water and wastewater treatment plants, and bleach plants.

MEDIA COMPOSITION

ProGuard 400 chemisorbant media is a round, porous pellet manufactured from activated alumina, water and impregnated with a proprietary chemical blend including sodium thiosulfate. This uniquely designed pellet has the chemical uniformly distributed throughout for maximum availability for reaction with target contaminants.

MEDIA ADVANTAGES

- *Low dust*
- *Non flammable*
- *Nontoxic and nonhazardous*
- *Does not support bacterial or fungal growth*
- *Easy disposal*

TARGET CONTAMINANTS AND THE REMOVAL PROCESS

Contaminants are removed by adsorption and chemical reaction. Odorous gases penetrate into the core where they react with the chemical impregnate and are converted into safe, non-odorous byproducts. Common contaminants include chlorine and chlorine dioxide.

EMERGENCY GAS SCRUBBING

ProGuard 400 is a direct replacement for media used in emergency chlorine gas scrubbers. These scrubbers are used at drinking water treatment plants to control accidental releases of chlorine gas from pressurized cylinders which have been used to chlorinate potable water.

ADDITIONAL MEDIA

ProMark provides a range of media that covers all gas phase filtration requirements.

ProGuard 100 is designed for ethylene and general odor control. **ProGuard 200** is designed for toxic and corrosive gases.

ProGuard Blend combines ProGuard 200 or 300 and carbon for general odor control over the greatest range of gases. **ProGuard 600** is virgin, coconut shell based, granular carbon effective at removing lower molecular weight VOCs and for general odor control.

ProGuard 700 is activated coal based carbon for general odor control. **ProGuard 800** is designed for ammonia and other basic pH gases. **ProGuard 900** controls acid gases.

Dry 208 desiccant replaces any alumina based desiccant media for air or liquid drying. The right media will be selected to address the specific need based upon contaminant gases present, concentration levels, airflow requirements, environmental concerns and room design considerations.

YOUR COMPLETE SOURCE FOR GAS PHASE FILTRATION

- *Media for all types of applications (KMnO₄ on alumina, plain carbon, impregnated carbon)*
- *Equipment design and supply*
- *Laboratory support, media testing, coupon analysis*
- *Monitoring instruments*
- *Technical support for application and design*



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CHEMICAL CAPACITY

ProGuard 400 shall remove 8% by weight minimum of chlorine when used in properly designed equipment and flow rate.

PHYSICAL PROPERTIES

ProGuard 400 shall have the following physical properties:

- **Moisture Content** 25% maximum
- **Apparent Density** 50 lbs./cu.ft (.80 gm/cc)
- **Spheres** 3x6 mesh range, nominal 3/16" diameter
- **Abrasion Loss** 3% maximum
- **Crush Strength** 18 lbs minimum

QUALITY CONTROL

Quality control is maintained by monitoring the physical properties and chemical capacities and ensuring they fall within specifications.

APPLICATION GUIDELINES

ProGuard 400 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** 60 FPM to 500 FM in commercial and industrial systems
- **Media Performance** ProGuard 400 shall be designed for 99.5% min. removal efficiency when new in properly designed systems.
- **Media Life** In order to determine ProGuard 400 media life, periodic samples shall be taken and returned to the factory for analysis. The results of testing make it possible to project changeout intervals and ensure media performance.

INSTALLATION AND DISPOSAL REQUIREMENTS

Installers shall use dust masks, safety goggles, and rubber gloves. Spent ProGuard media should be disposed of according to local, state and federal guidelines.

PACKAGING

ProGuard 400 media is packaged in three mil poly bags inside a double wall corrugated box that holds 50 lbs (one cubic foot). Media is also available in 50 lb plastic pails and bulk sacks up to 2,000 lbs.

ADDITIONAL INFORMATION AND RELATED EQUIPMENT

- **PMA Media Selection Chart** - lists specific gases that are controlled by ProGuard 200 media (potassium permanganate on alumina) as well as gases controlled by ProGuard 700 carbon and other media, either alone or in a blend.
- **PMA 12 & 18 Media Modules** - refillable steel, standardized modules that hold the ProGuard media for use in housings.
- **PMD 12 & 18 Media Modules** - disposable modules that are filled at the factory with any of the ProGuard media.
- **PMA Trays** - refillable steel trays that hold media for installation in various housings.
- **Honeycomb Disposables** - directly replace refillables and can be filled with any of the ProGuard media.
- **Carbon Bonded Disposables** - activated carbon in a bonded block disposable filter, suitable for high purity applications; more carbon per panel than a comparable loose fill. Eliminates metal and labor to empty and fill metal trays.