PURAGEN ACTIVATED CARBON

Specialty air and gas filtration

PRODUCT	GAC	EAC	LOW DENSITY	LOW PRESSURE DROP	HARDNESS	ACID GASES	PURITY	SMALL ORGANICS	ORGANICS	INORGANICS	CHEMISORPTION AVAILIBLE
Oxpure 3C		√	-	√	-	-	-	-	√ √ √	-	-
Oxpure 3C - H3O		√	-	√	-	-	-	-	-	-	-
Oxpure 3B		√	-	√	-	-	-	√ √	-	-	√
Oxpure 3B - AW		√	-	√	√	-	-	√ √	-	-	-
Oxpure 3W		√	√	√	-	-	-	√	-	-	√
Oxpure 612C	√		-	-	-	-	-	√ √ √	-	-	√
Oxpure 612C-KI	√		-	-	-	-	-	-	-	√ √ √	-
Oxpure 4C		√	-	√ √	√	-	√	√ √ √	-	-	-
Oxpure 4B		√	-	√ √	√	-		√ √	√ √	-	√
Oxpure 4B - AW		√	-	√ √	√	-	√ √	√ √	-	-	-
Oxpure 4B – H2O		√	-	√	-	-	-	-	-	-	-
Oxpure 4B - KOH		√	-	√	-	-	-	-	-	-	-
Oxpure 4W		√	√	√ √	-	-		√	-	-	√
Oxpure 48C	√		-	√	√ √	-	√	√ √ √	√ √ √	-	√

SOLVENT RECOVERY

Many industrial processes use organic solvents in the production of their products. These solvents need to be captured to prevent emissions into the environment or recovered for re-use. Puragen Activated Carbon is used as part of solvent recovery systems that pass solvent laden air (SLA) through the activated carbon bed to adsorb

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organic solvents. Once the carbon bed becomes exhausted, the solvent recovery process will switch from adsorption mode to a desorption mode to regenerate the activated carbon media. In some processes the activated carbon life cycle can last many years before it must be replaced.

Solvent recovery systems can vary by design and are typically installed with more than one adsorber So that one bed can be regenerated while the others are in adsorption mode. Solvent recovery processes can be employed for single organic solvents as well as multi-component solvent systems. Single component systems in many cases adsorb and recover the solvent for re-use. Multi component systems typically adsorb and then destruct the organic as it is difficult to separate multi-organic solvents. Puragen Activated Carbon products for this application are commonly large mesh granular or extruded pellets to minimize pressure drop across the bed. The specific properties of the activated carbons can vary with pore volume, pore size, density, purity, and hardness.

GENERAL FILTRATION

Many of today's industrial facilities, chemical processes, new furniture, kitchen exhaust, and a variety of other point sources produce gases which can be offensive and irritant as well as potentially cause operational and health problems. These problems can lead to thousands of hours of downtime, lost labour hours, and millions of dollars of lost revenue.

Airborne contaminants may be organic or inorganic and may require specialty treated activated carbons to either physically adsorb or chemisorb these contaminants. Many organic compounds are physically adsorbed such as common solvents, methyl disulfides, and mercaptans. Inorganic and some organic compounds will also need to be controlled by chemisorption. This means that the contaminant reacts with a specially selected surface chemical to form a non-toxic substance to remove it from the air stream. Examples of inorganic contaminants are acid gases such as hydrogen sulfide and chlorine dioxide or strong odours such as ammonia.

ODOUR CONTROL

For industrial and waste treatment plants sewage treatment plants and oil refineries where, foul odours can be harmful to human health or unpleasant to the facility's neighbours, odour control technology is critical. Odors can result from organic or inorganic contaminants and may require specialty treated activated carbons to either physically adsorb or chemisorb these compounds. Many odours that are organic based are physically adsorbed such as common solvents, methyl disulfides, and mercaptans. Inorganic and some organic compounds will also need to be controlled by chemisorption. This means that the contaminant reacts with a specially selected surface chemical to form a non-toxic substance to remove it from the air stream. Examples of odours from inorganic contaminants are acid gases such as hydrogen sulfide and chlorine dioxide or strong odours such as ammonia. Puragen Activated Carbon offers standard, and specialty treated products in both granular and extruded sizes that provide high-efficiency odour reduction.