MV TECHNOLOGIES

TECHNICAL DATA SHEET
AxTrap™ 4003

1/2016

General Description:

AT 4003 is a unique patented and patent pending high-capacity granular media. It is comprised of high porosity mixed iron-oxides tightly bound on an inert base. This media is specially designed to lessen the negative effect of non-methane VOCs, such aromatics, halogenated hydrocarbons, and aldehyde/ketones, commonly found in landfill gas and in some industrial, digester and natural gas streams. This media is useful for H_2S removal as well as lower amounts of light mercaptans/COS that may be present in a wide variety of gasses. This high-capacity media works dependably without oxygen; however some higher levels of oxygen can increase reaction speed and improve sulfur removal capacity.

AT 4003 reliably performs in "water-saturated" gas. Added water in the feed gas may be needed if the gas is more than occasionally less than 100% R.H. to achieve expected capacity and level of total sulfur removal.

AT 4003 will not break down when soaked in water and media life can be extended by brine or water washing/soaking, in place. Spent media can easily be cleaned by a variety of wet/dry methods including vacuum.

Product Features :

- High capacity sulfur removal, up to 14% by weight for anaerobic (10 lbs sulfur/ft^3). and up to 21%+ by weight for aerobic conditions (15+ lbs sulfur/ft^3).
- Cost-effective reliable low level H_2S removal with starting outlet levels at non-detect and slowly rising to the desired maximum outlet concentration.
- Removes lower levels of mercaptans/COS together with higher level H_2S.
- Effective removal of light mercaptans with virtually no conversion to disulfides that occurs with other iron-based products, with or without O_2.
- High particle strength and low dust content.
- Spent media is easy and safe to handle by a variety of methods.
- Low and stable pressure drop, beginning to end.
- Presence of some liquid water or hydrocarbons does not interfere or degrade the *AxTrap* media.
- Can be brine or water washed/soaked, in place, to increase sulfur removal.

Product Uses:

Removal of H_2S and lesser amounts of light mercaptans/ trace COS from gas streams.

Properties:

	Physical Properties (Typical)	**Chemical Analysis**
Form:	Random shaped orange/brown/black granules	Proprietary Promoted
Size:	**4** x 8 Mesh	Mixed Iron Oxides
pH:	6.5 – 7.3	Formed on Inert Base

Solubility in water: non **Flammability:** non
Bulk Density: 1.1 g/ml or about 70 lbs/ft^3
Recommended Temperature of Operation: 32ºF to 220ºF or 0ºC to 105ºC
Recommended Water Content of the Gas: 100% R.H. Some water or liquid hydrocarbon condensation in the media is not a problem.
Beginning Outlet Concentration at Start: Non-detected H_2S.
End-of Life Outlet Concentration by Design: typically 1 ppm H_2S or higher

Shipping & Handling

- DOT Non-Hazardous.
- Avoid breathing excessive dust. Do not take internally.
- Please refer to Material Safety Data Sheet for further information.
- *AT 4003* normally available in 2000 lb. bulk bags. Custom packaging is available.

TO ORDER MEDIA:

Contact MV Technologies • Tel: 303.277.1625 • Email: info@mvseer.com

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