AirCare Iron Oxide Media

Product

AirCare Iron Oxide Media safely and irreversibly removes hydrogen sulphide and light mercaptan type odours from any air or gas stream. *AirCare* Iron Oxide Media is a non-corrosive, non-toxic granular material that selectively treats hydrogen sulphide and light mercaptans (methyl and ethyl) in a batch type process. This high capacity product is unique in that it reliably and predictably functions in partially to fully humid air. *AirCare* Iron Oxide Media is easy to handle and environmentally safe in both its un-reacted and reacted forms for easy disposal. All concentrations of hydrogen sulphide can be treated to virtually any outlet concentration desired. *AirCare* Iron Oxide Media is extremely flexible, maintaining treatment during variations encountered in normal operation without operator adjustment. This product is also ideal for treatment of biogas (digester and landfill), industrial vent gas, and other non air streams that benefit from the low pressure drop characteristics of the Media.

Application

AirCare Iron Oxide Media can be used in common drum, box, or tank type vessels. Entrained or condensed liquids and solids should be removed in a separator, knockout, or drip pot just prior to entering the vessel(s). *AirCare* Iron Oxide media is applied in fixed bed reaction vessels operated, preferably, in down flow mode (helps prevent accumulation of condensed liquids). Bed depths can range from 0.5 meter with good inlet distribution and outlet collection design, up to 12 metres deep. Systems can range from single or multiple vessels in parallel flow to lead / lag, or reversible series flow through two vessels where heavy loads of H_2S are encountered. Computer aided design will specify the appropriate system and bed design, and the process results such as pressure drop, days to operate, etc.

Handling

AirCare Iron Oxide Media can be kept for an indefinite period of time under normal storage conditions without loss of effectiveness. Product can be stored outside if protected from direct weather elements. No special handling or environmental inventory is required being non hazardous and non-toxic.

Physical Properties

Shipping	DOT Non-Hazardous
Apparent density	1.0 g/cc
Graded granular size	4 to 16 mesh
H_2S removal capacity	Up to 25% by weight
Appearance and odour	Black granular, odourless
Availability	900 kg super sacks and 22 kg bags

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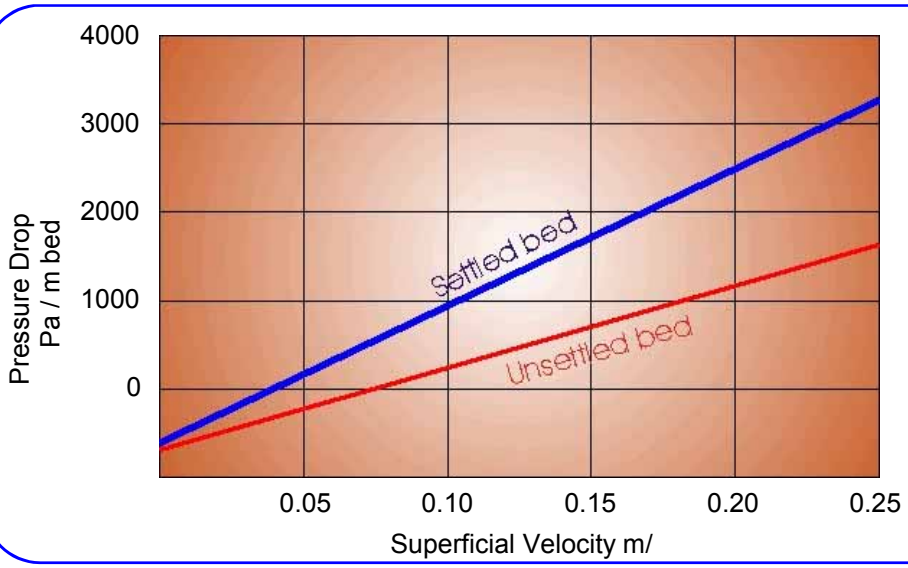
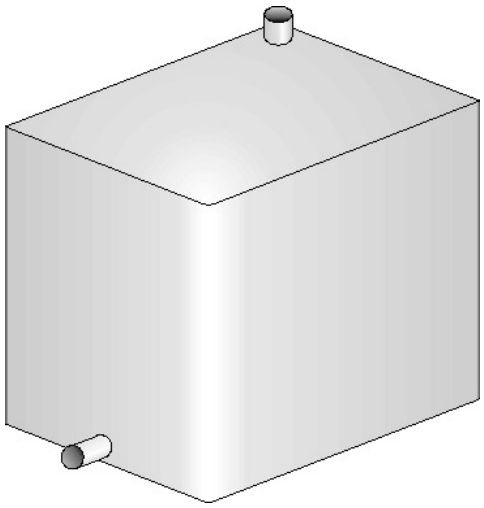
Air Care Technology Ltd continuously strives to improve the quality of our products, and we reserve the right to change or discontinue any product at our discretion without notice or obligation.

Clean Air Systems and Products

Pressure Drop Curve

Air Care Technology Ltd will assist owners and contractors by specifying the appropriate *AirCare* Iron Oxide Media. Air Care Technology Ltd offers 2.4 cubic metre odour control drums or pre assembled drum packages that include blowers in 12 L/s and 24 L/s flow capacity ideal for low flow "wet well" applications. Large systems can use custom designed odour control units, available for flows ranging from less than 500 L/s to over 3000 L/s per unit, depending upon specified operating conditions. These low profile units are specifically designed for low pressure drop and even distribution across the beds.





Odour Control Drum System

The *AirCare* Odour Control Drum System is a package that includes a 2.4 cu m 304SS drum to be fitted with *AirCare* Iron Oxide Media, connected to either a 12 L/s or 24 L/s blower and mounted on a plastic pallet for convenient handling. The system is used to remove hydrogen sulphide, light mercaptans and other sulphur contaminants from air, gas or other vapours. *AirCare* Iron Oxide Media provides consistent high removal efficiencies regardless of wide variations of pollutants entering the system. Compared to similar carbon or activated alumina systems *AirCare* Iron Oxide Media has a higher removal capacity and lower cost. Ventilation from the odour source (i.e. wet well, etc.) is piped through flexible tubing to the top of the 2.4 cu m drum and is pulled through the *AirCare* Iron Oxide Media product by a blower. The exhaust ventilation may then be vented as desired by the customer. A 24 L/s blower is recommended for continuous H_2S concentrations up to 10 ppm, and 12 L/s for up to 100 ppm, with 90% to 99% removal. Each drum will remove approximately 36 to 45 kg of H_2S, and can be recharged with fresh *AirCare* Iron Oxide Media, which is sold separately. *AirCare* Iron Oxide Media is dry, granular, non-hazardous and non-toxic. It is delivered in 22 kg plastic bags. Fully assembled units are mounted on a plastic pallet with an empty drum.

Customer Installation Includes:

Loading ten 22 kg bags of product, connecting blower to power and connecting 50 mm inlet duct to drum and 50 mm outlet ventilation duct from blower.

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Related Products:	Data Sheets:
Circul-aire Gas Adsorbtion	E54154

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