

# OCP GRANULAR H<sub>2</sub>S SCAVANGER

## TECHNICAL DATA SHEET

## OCP 1175

**General Description - OCP 1175** is a patent-pending high-capacity non-hazardous granular media. It is comprised of a high porosity mixed iron-oxide tightly bound on a stable hygroscopic inert base. The media is used selective removal of H<sub>2</sub>S and light mercaptans in natural gas and other gasses. This high-capacity media works without oxygen; however a minimum molar ratio, O<sub>2</sub> to H<sub>2</sub>S, of 1 or more will increase reaction speed and improve sulfur removal capacity. This unique formulation allows reliable performance in less than "water-saturated gas" without need for added water.

### Product Features

- ☐ High capacity sulfur removal, up to 14% by weight for anaerobic (11 lbs sulfur per cu.ft.), up to 28% by weight with  $\geq 5:1$  - O<sub>2</sub>:H<sub>2</sub>S ratio
- ☐ Cost-effective reliable low level hydrogen sulfide removal with starting outlet levels at non-detect and slowly rising to the desired maximum outlet concentration
- ☐ Forms basic sulfur and stable iron sulfides
- ☐ Can be used in any "iron sponge" or solid sweetening media type tower
- ☐ High particle strength and low dust content
- ☐ Low and stable pressure drop, beginning to end
- ☐ Presence of liquid water or hydrocarbons does not interfere
- ☐ Removal of H<sub>2</sub>S and light mercaptans from gas streams

### Product Uses

### Properties

#### Physical Properties (Typical)

**Form:** Random shaped orange/brown/black granules

**Size:** 4 x 14 Mesh

**pH:** 6.5 – 7.3

**Solubility in water:** non

**Flammability:** non

**Bulk Density:** 1.1 g/ml or 72 lbs per cubic foot

**Surface Area:** 100-135 m<sup>2</sup>/gr

**Pressure Drop:** psi = 0.03\*ft/min(EB)\*feet of media

**Recommended Temperature of Operation:** 32°F to 150°F, 0°C to 65°C

**Recommended Water Content of the Gas:** 85% to 100% R.H. Some water or liquid hydrocarbon condensation in the media is not a problem.

**Beginning Outlet Concentration at Start:** Non-detect H<sub>2</sub>S

**End-of Life Outlet Concentration by Design:** 0.1 ppm H<sub>2</sub>S or greater

**Estimated Contact Time Required for Minimum Design – Single Vessel:**

Without Oxygen - Minutes =  $2.96 \times (30/^\circ\text{C}) \times \log(\text{average or peak inlet ppm} / \text{maximum outlet ppm desired})$

With 5:1 or more O<sub>2</sub>:H<sub>2</sub>S Ratio – Minutes =  $1.35 \times (30/^\circ\text{C}) \times \log(\text{average or peak inlet ppm} / \text{maximum outlet ppm desired})$

#### Chemical Analysis

Proprietary Formed Iron

Oxides on inert base

### Shipping & Handling

- ☐ Non-hazardous
- ☐ Avoid breathing excessive dust. Do not take internally.
- ☐ Please refer to Material Safety Data Sheet for further information.
- ☐ **OCP 1175** is available in 1000, 2000 and 2500 lb. bulk bags.

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