

OCP GRANULAR H₂S SCAVANGER

TECHNICAL DATA SHEET

OCP 1100

General Description - OCP 1100 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 H₂S and light mercaptans in natural gas and other gasses. This high-capacity media works without oxygen; however a minimum molar ratio, O₂ to H₂S, 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 $\geq 5:1$ - O₂:H₂S 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 H₂S 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 m²/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 H₂S

End-of Life Outlet Concentration by Design: 0.1 ppm H₂S 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 O₂:H₂S 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 1100** is available in 1000, 2000 and 2500 lb. bulk bags.

Tyler Chemicals Ltd

Box 2176

Brooks, Ab T1R 1C 8

1-403-362-3725 24 Hr

1-403-362-5299 Fax

E-Mail tclgreen@telusplanet.net