



## TECHNICAL DATASHEET

# GS63

## Potassium Hydroxide (KOH) Impregnated Activated Carbon for Hydrogen Sulfide (H<sub>2</sub>S) and Mercaptans removal

Various types of activated carbon can be used for hydrogen sulfide and mercaptans removal from gas streams.

Determining the optimal process and suitable type of activated carbon is a complex task, influenced by the gas composition and physical conditions like temperature and humidity.

GS63 activated carbon is a special potassium Hydroxide (KOH) impregnated activated carbon which causes a chemical reaction between H<sub>2</sub>S and KOH to form Sulfide salts.

The reaction of hydrogen Sulfide/Mercaptans to salts occurs inside the activated carbon's pores which enables a high reaction rate and high loading rate.

Due to the reason that the reaction can occur without oxygen presence, the GS63 activated carbon is an ideal solution for biogas desulfurization and similar processes.

SPECIFICATION AND TYPICAL PROPERTIES*	
Base material	Coal
CTC % before impregnation Min	60%
Bulk density kg/m <sup>3</sup> (before Impregnation)	480kg/m <sup>3</sup>
Bulk density kg/m <sup>3</sup> (after Impregnation)	590kg/m <sup>3</sup>
Hardness % Min	95%
Ash Content % Max (before Impregnation)	12%
Impregnant wt%	10%
Diameter	3 mm
Iodine value Min (before impregnation)	950 mg/g

\*Specifications and typical properties are listed for informational purposes only and not to be used as purchase specifications.

### Typical Applications

- Desulfurization of Biogas
- Desulfurization of other gas streams
- Cleaning odor from WWTP and solid waste gases and ventilation
- Cleaning odor from H<sub>2</sub>S and Mercaptans in waste gas
- Other industrial applications

### Features and Benefits

- High adsorption ability and loading rate for H<sub>2</sub>S and Mercaptans
- High percentage of KOH impregnation – 10%
- Higher reaction rate vs the alternatives
- High removal efficiency for waste gas w/o Oxygen or Air
- Exceptionally high hardness and crush strength

### Standard Packaging

- 25kg bag
- 500kg bulk bag
- 550kg bulk bag
- Other packing considered on request

### Disposal

At the end of its useful life, all carbon media should be disposed of in a responsible manner and in accordance with all sites, local and statutory regulations relevant to the point of use.