

# FERROLOX -XG

#### TOXIC GAS REMOVAL

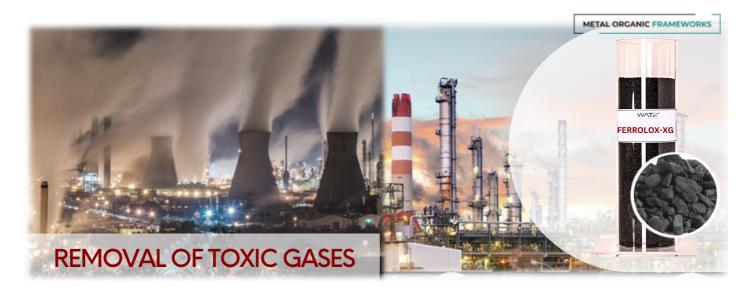
#### INTRODUCTION

**FERROLOX-XG** is Carbon based **Metal-Organic-Frameworks** for capturing and degradation of **toxic** gases and vapours.

Removing the troublesome and highly toxic impurities of Hydrogen Sulfide (H2S) and Carbon-dioxide from gases has become so simple and highly effective using the **Metal (Iron Hydroxide) Organic (Carbon) Framework (MOF) Technology**.

When compared to conventional Adsorbers or other processes which are associated with numerous problems, **FERROLOX-XG** with MOF technology adsorber is a **regenerable Adsorber** for the removal of troublesome impurities, toxic gases and heavy metals from water, waste water or gases.

FERROLOX-XG adsorber can be regenerated by using Oxygen-Based-Regeneration OXYDES-XG.



## **REMOVAL OF**

- Hydrogen sulfide
- Volatile Organic Compounds (VOCs)
- H2S, CO2, CO, NOx, SOx, NH3,
- Nitrogen in the form of hydrogen cyanide
- Sulfur-containing compounds like Organothiols, hydrocarbons, etc.
- Highly toxic impurities of Carbon dioxide
- · Multiple acidic gases.

#### **APPLICATIONS**

- Oil & Gas Industry
- Refineries
- Petro- Chemical industries
- · Gases in Oil Well
- Fuel Tanks
- Biogas & industrial Application
- Sewage water and odour
- Waste Water and Odour



## **TECHNICAL DATA**

FERROLOX-XG

SPECIFICATIONS	
Colour	Reddish Black Granules
Granule Size	2 - 5 mm
Moisture Content	Max: 5%
Bulk density	Ca. 550 - 620 kg/m3
Specific Surface Area	1880 -2000 m2/g

#### SIMPLE REGENERATION WITH

## Oxygen-Based-Regeneration OXYDES -XG

**'OXYDES-XG'** the Oxygen based granular can deliver huge amount of Oxygen without bubbling and will clean and disinfect Adsorber surface.

## **PACKAGING**

 60 L Drum (42 Kg/drum) - 18 drums on a pallet

Other packing considered on request



OPERATING PARAMETERS	
Inlet H2S Concentration	50 mg/l to 15000 mg/l
Bed height	Min: 0.5 m Max: 12 m
Pressure loss in filter bed	< 1 to 15 mbar depending upon bed height and granule size
Pressure range	No pressure – ca. 25 bar overpressure
Contact time	20 sec – 3 min
Relative gas moisture	Min: 40 % Optimal: 60 % - 80 %
Backwash Velocity	US 10 – 12 gpm/ft2 SI 25 – 30 m/h
Regeneration	Yes*

**Note**: A partially regenerated mass of granules containing sulfur, may ignite when comes in contact with oxygen. Sulfur ignites in in air at temperature ranging between 190 °C and 260 °C.

\*Loaded **FERROLOX-XG** Adsorber can be regenerated with **OXYDES-XG**.

'Watch Water have developed a modified Metal-**Organic-Frameworks** for assessing importance of Oxygen-Based-Regeneration of toxic Adsorbers at contamination sites. The framework has the potential to help environmental professionals and regulators, Watch Water Solutions are much more cost effective and environmentally responsible remediation plans.

For more information on Oxygen-Based-Regeneration products, please contact us.

**WATCH WATER CARBONS** 

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