



**ADVANCE**  
ALLIANCE

Nature in a bottle

# H<sub>2</sub>S

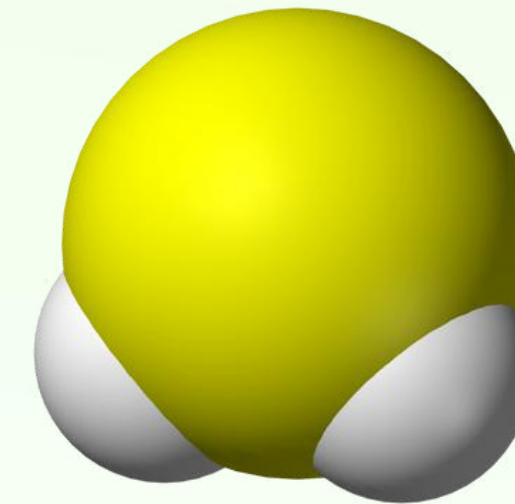
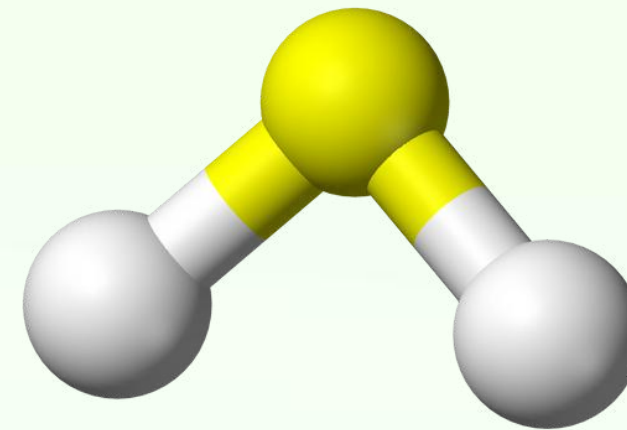
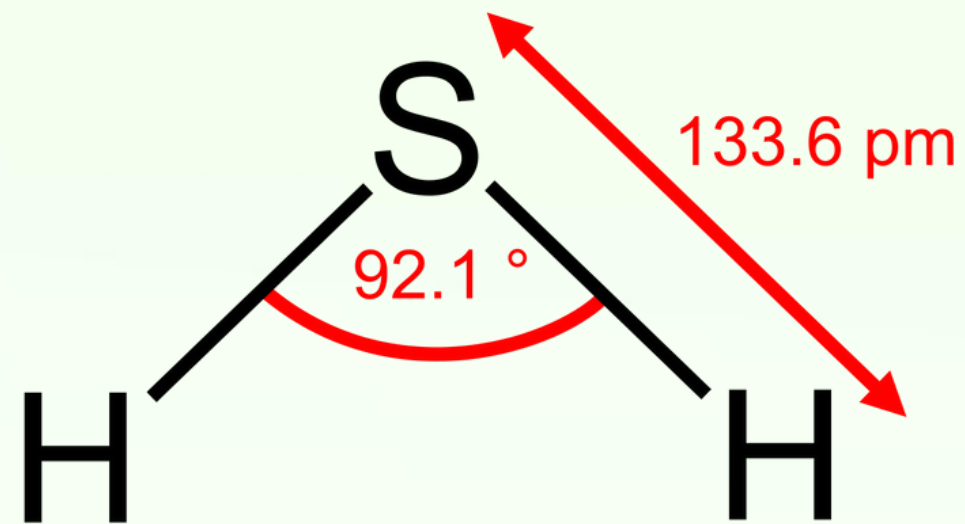
Cost effective bio-remediation agent  
Brought to you by Advance Alliance





# H<sub>2</sub>S Molecule

- Hydrogen Sulphide is a dangerous gas commonly found in the oil and gas industry
- It is flammable, colourless, and has a distinct odour similar to rotten eggs
- Its production occurs naturally in crude petroleum, and through bacterial breakdown of organic materials
- Industrial activities such as petroleum drilling and refining generate this gas
- Liquid compressed gas form is also possible





# How does it affect you?

H<sub>2</sub>S is the most dangerous gas encountered during drilling operations. It is toxic, corrosive and flammable, resulting in:

- Injury to workers, or even death
- Damage to equipment
- Massive loss of productivity and profit







**ADVANCE**  
ALLIANCE

# What do we do?

Advance industries presents the 100% environmentally friendly Hydrogen Sulphide metaboliser. The most cost effective and efficient means of rapidly metabolising Hydrogen Sulphide, into harmless proteins and amino acids.

The product is a proven means to rapidly metabolise Hydrogen Sulphide from fatal to harmless levels within minutes. The product is environmentally friendly and harmless to humans.

Nature in a bottle.

# Advantages

- Ergofito is highly cost-effective in metabolising H<sub>2</sub>S gas quickly
- It reduces H<sub>2</sub>S levels from fatal to below 1ppm within minutes
- Traditional H<sub>2</sub>S control methods are generally more expensive in terms of installation and maintenance



Nature in a bottle.





# Tested

**In a test conducted by Musa Group in waste water analysis in Saudi Arabia, H<sub>2</sub>S levels decreased from a base of 92ppm in the air, to 0ppm in the air after 3 hours.**

***In the water, levels decreased from 3.6ppm to 1.5ppm in the same 3 hour period.***

Nature in a bottle.



# Tested

*Used extensively in Northern Iraq alongside Drager H<sub>2</sub>S meters, that release the Ergofito mix using a misting system, as soon as H<sub>2</sub>S levels surpass the ppm threshold.*

*This has proven to be an exceptionally effective and efficient method.*

الله أكبر



# Ergofito Global

- Ergofito has been used as a bio-remediation agent in 48 countries, including the Kingdom of Saudi Arabia, Kuwait, Oman, USA, Iraq, India, Belgium, South Africa, Italy, Spain, Argentina, New Zealand, Australia and Indonesia.



- EPA Certified

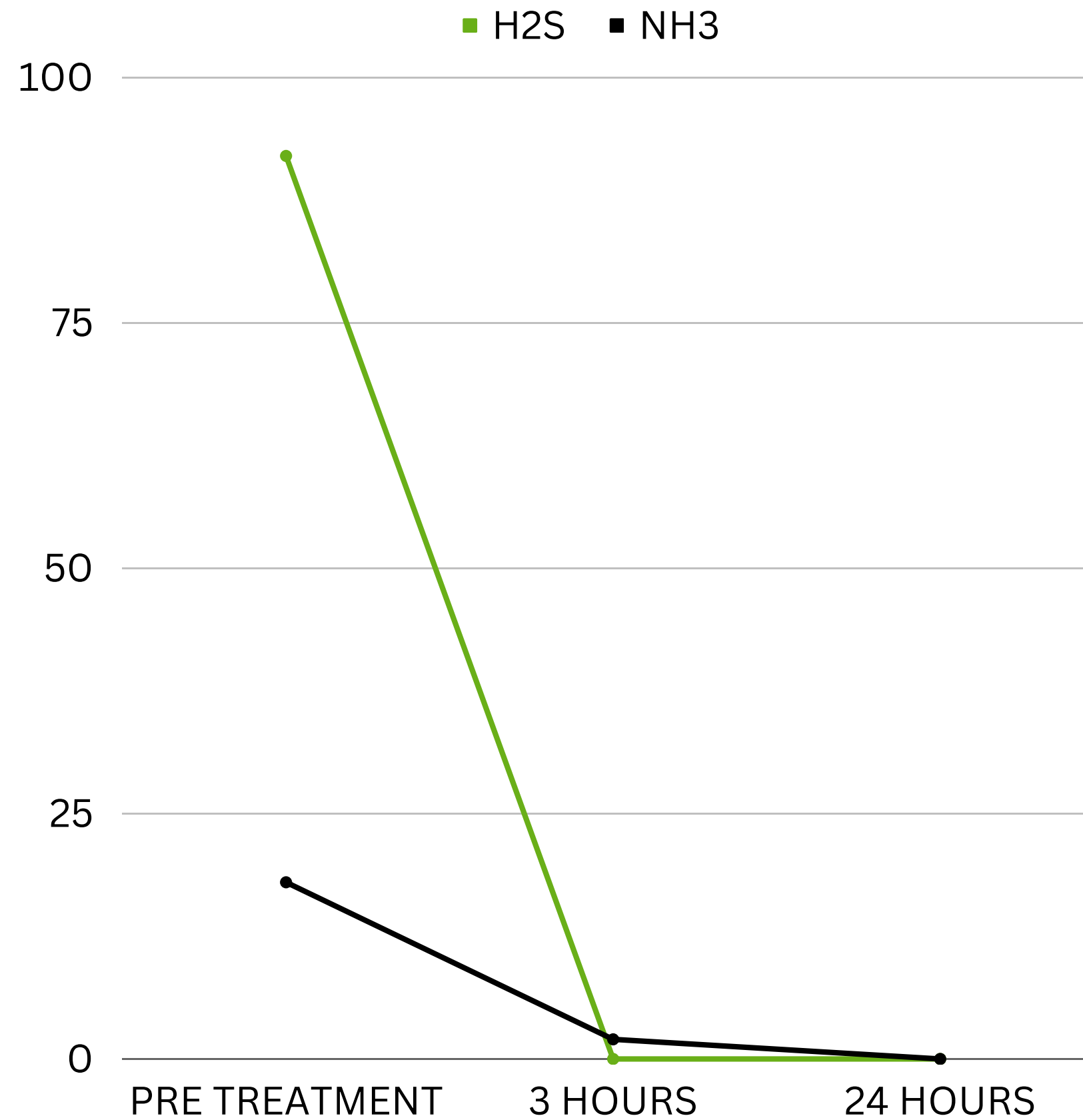


# THE EFFECT OF ERGOFITO ON H<sub>2</sub>S AND NH<sub>3</sub> LEVELS IN AIR



**ADVANCE**  
ALLIANCE

Measured in ppm





Environmental lab Report

**Wastewater Analysis Results**

Project No.	0195
Client/Plant	الشركة السعودية لأعمال البيئة
Test Location	Jeddah
Date	9/12/2009

**Result of wastewater analysis (ppm)**

Raw wastewater

( عينة مياه الصرف الصحي ) Raw wastewater

S/N	Parameter	Raw wastewater	
		In water	In the close Air
1	PH	7.63	
2	NH3	1.20	18
3	H2S	3.60	92

After treatment

After 3 hours Aeration

S/N	Parameter	After 3 hours Aeration	
		In water With Micromix	In the close Air With Micromix
1	NH3	1.50	2
2	H2S	1.50	0

After 24 hours Aeration

S/N	Parameter	After 24 hours Aeration	
		In water With Micromix	In the close Air With Micromix
1	NH3	0.30	0
2	H2S	1.50	0

**METHOD:** Standard Methods for the Examination of Water and Wastewater,  
Published by EPA, AWWA, APHA, WEF.

Abdullah Yousef

  
Lab. Manager



Dr. Magdy Khalil

  
Executive Manager





# Emergency Management

http://www.epa.gov/oem/content/ncp/products/ergofit.htm

Last updated on Tuesday, August 09, 2011

You are here: [EPA Home](#) [Emergency Management](#) [NCP Subpart J](#) [NCP Product Schedule](#)  
ERGOFIT MICRO MIX AQUA

## ERGOFIT MICRO MIX AQUA

TECHNICAL PRODUCT BULLETIN: B-67  
USEPA, OIL PROGRAM CENTER  
LISTING DATE: JULY 27, 2011  
"ERGOFIT MICRO MIX AQUA"

### I. NAME, BRAND, OR TRADEMARK

ERGOFIT MICRO MIX AQUA  
Type of Product: Bioremediation Agent (Microbiological Culture, Enzyme Additive, Nutrient Additive)

### II. NAME, ADDRESS, AND TELEPHONE NUMBER OF MANUFACTURER/CONTACT

ERGOFIT USA LLC  
40 E. Main Street #379  
Newark, DE 19711  
Phone: (302) 235-3085  
Fax: (801) 846-8043  
Mobile: (985) 722-8882 or (310) 739-9773  
E-mail: [info@micromix-usa.com](mailto:info@micromix-usa.com)  
Web Site: [www.micromix-usa.com](http://www.micromix-usa.com)  
(Mr. Warren Russell, US Factory Representative)

### III. NAME, ADDRESS, AND TELEPHONE NUMBER OF PRIMARY DISTRIBUTORS

Systems Research International, Inc.  
13 Hermitage Court  
Destrehan, LA 70047-3626  
Phone: (985) 764-1692  
Mobile: (985) 722-8882  
E-mail: [info@micromix-usa.com](mailto:info@micromix-usa.com)  
Web Site: [www.micromix-usa.com](http://www.micromix-usa.com)  
(Mr. Ram Ramachandran, Principal Engineer)

### IV. SPECIAL HANDLING AND WORKER PRECAUTIONS FOR STORAGE AND FIELD APPLICATION

1. Flammability: Water-based, Non-flammable
2. Ventilation: Needs no ventilation; aqueous-based organic product; does not emit hazardous vapors. Some CO<sub>2</sub> may build up.
3. Skin and eye contact; protective clothing; treatment in case of contact: ERGOFIT MICRO MIX AQUA is not a dermal irritant. Avoid eye contact, and wear goggles when using product. Eyewash for quick and copious eye flushing should be available on site. Seek prompt medical attention should contact occur and if irritation persists. Protective rubber gloves are suggested during handling. ERGOFIT MICRO MIX AQUA has a smell of fermentation and yeast. The product does not give off harmful vapors. Long storage will cause build CO<sub>2</sub> in water vapor.
- 4.a. Maximum storage temperature: 104°F
- 4.b. Minimum storage temperature: 32°F
- 4.c. Optimum storage temperature range: 57°F to 97°F
- 4.d. Temperatures of phase separation and chemical changes: above 113°F

### V. SHELF LIFE

ERGOFIT MICRO MIX AQUA has a recommended shelf life of 5 years. After 5 years at

http://www.epa.gov/oem/content/ncp/products/ergofit.htm

Last updated on Tuesday, August 09, 2011

[Emergency Management](#) [NCP Subpart J](#) [NCP Product Schedule](#)  
AQUA

## VII. TOXICITY AND EFFECTIVENESS

a. Toxicity:  
NA

b. Effectiveness:

Bioremediation Agent Effectiveness Test (40 CFR 300.900), Federal Register September 15, 1994:

### Summary Data Table:

DAYS	PRODUCT	TOTAL MEAN ALKANES (ppm)	RED% 28 DAYS	TOTAL MEAN AROMATICS (ppm)	RED% 28 DAYS
0	CONTROL PRODUCT	239,235 239,686	0 0	16,502 17,431	0 0
7	CONTROL PRODUCT	217,023 17,819	9.30 92.6	10,942 9,606	33.70 44.90
28	CONTROL PRODUCT	188,379 2,216	21.3 99.10	8,989 3,100	45.50 82.20

### Results of Gravimetric Analysis:

Percentage (%) Decrease in Weight of Oil on Day 28

Control: 1.7%

Product: 45.6%

Avoid eye contact, and wear goggles when using product. Eyewash for quick and copious eye flushing should be available on site. Seek prompt medical attention should contact occur and if irritation persists. Protective rubber gloves are suggested during handling. ERGOFIT MICRO MIX AQUA has a smell of fermentation and yeast. The product does not give off harmful vapors. Long storage will cause build CO<sub>2</sub> in water vapor.

- 4.a. Maximum storage temperature: 104°F
- 4.b. Minimum storage temperature: 32°F
- 4.c. Optimum storage temperature range: 57°F to 97°F
- 4.d. Temperatures of phase separation and chemical changes: above 113°F

ERGOFIT MICRO MIX AQUA has a recommended shelf life of 5 years. After 5 years at





**ADVANCE**  
ALLIANCE

# Contact Us

For any questions or clarifications on our presentation.

## Website

[ergofitobio.com](http://ergofitobio.com)

---

## Phone Number

+27 82 678 0070

---

## Email Address

[info@ergofitobio.com](mailto:info@ergofitobio.com)