



SAFETY



HSEQ library

TOOLBOX INFORMATION

H₂S

HYDROGEN SULFIDE

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HSEQ Direct is a digital communication, registration and training platform with a focus on Health, Safety, the Environment and Quality.
Designed specifically for the workplace!

Associated IOGP Life-Saving Rules



HSEQ DIRECT  safer healthier workplace



WHAT IS IT?

Hydrogen sulfide (H₂S) is a colorless gas with with a distinctive foul odor of rotten eggs. It causes a wide range of health effects.

Workers are primarily exposed to hydrogen sulfide by breathing it. The effects depend on how much hydrogen sulfide you inhale and the exposure period. Exposure to very high concentrations can quickly lead to death. **Maximum caution and care is required!**



HAZARDS

Hydrogen sulfide is extremely poisonous, corrosive, and flammable. It inhibits the absorption of oxygen. It is very harmful to your health and the environment.



PREVENTION

BEFORE YOU START WORKING

- you must have permission from your HSE Manager to enter a hydrogen sulfide location
- you must be familiar with the hazards of H₂S
- ask your company for their policies and procedures about wearing protection and H₂S detection
- ask your company for their exposure limit relating to H₂S



PROTECTION

**Use the correct Personal Protection Equipment (PPE).
Ask your company about this.**



IN CASE OF... (1/2)

AN H₂S ALARM

- immediately stop all work, leave your workplace and report to your HSE Manager
- ask your company for the specific rules about what to do and the wearing of protection
- go to an assembly point located upwind
- plant at sea: go to an assembly point according to instructions
- leave the workplace directly at right angles to the wind direction



IN CASE OF... (2/2)

EXPOSURE

- plant on land: immediately notify the person responsible for first aid in your company and call an ambulance
- plant at sea: immediately notify the person responsible for first aid in your company and call the medic
- do not attempt any rescue actions; ask your company about what to do

IMPORTANT INFORMATION

- 1 You must be familiar** with the hazards of H₂S.
- Know what **the exposure limit is for H₂S**.
- 3 Know what to do** in case of an H₂S alarm or exposure.
- Ask your company about **wearing protection and H₂S detection**.
- Use the **correct PPE**.

QUESTIONS? MORE INFORMATION? UNSAFE WORKING CONDITIONS?

Your HSE Manager is there to help answer any questions and ensure a safe working environment for all.

QUESTION 1

What is hydrogen sulfide?

- A. Hydrogen sulfide is a colorless and odorless gas. It is extremely toxic and very harmful to the environment.
- B. Hydrogen sulfide is an extremely toxic gas. It is colorless, it smells strongly and it is very harmful to the environment. The gas is lethal after inhalation of a very low concentration.
- C. Hydrogen sulfide is an extremely toxic gas. It is colorless, it smells strongly of rotten eggs and it is very harmful to the environment.

ANSWER 1

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QUESTION 2

What do the effects of hydrogen sulfide depend on?

.....

A. How much hydrogen sulfide you inhale and the exposure period.

.....

B. Whether the wind is strong or weak.

.....

C. Whether you work on a plant on land or on a plant at sea.

.....

ANSWER 2

What do the effects of hydrogen sulfide depend on?

A. How much hydrogen sulfide you inhale and the exposure period.

B. Whether the wind is strong or weak.

C. Whether you work on a plant on land or on a plant at sea.

QUESTION 3

What are the hazards of hydrogen sulfide?

- A. It has a stinging effect on the eyes and throat. It inhibits the absorption of oxygen and is lethal in high concentrations.
- B. It has a stinging effect on the eyes and throat. The gas is lethal in very low concentrations.
- C. It has a stinging effect on the nose and throat. It inhibits the absorption of oxygen and even very low concentrations will result in immediate unconsciousness.

ANSWER 3

What are the hazards of hydrogen sulfide?

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C. It has a stinging effect on the nose and throat. It inhibits the absorption of oxygen and even very low concentrations will result in immediate unconsciousness.

QUESTION 4

What is the first thing you do in case of a hydrogen sulfide alarm?

A. Go to your HSE Manager and report the incident.

B. Immediately stop all work, leave your workplace and report to your HSE Manager.

C. Report the incident immediately, raise the alarm and immediately put on an escape mask.
Ask your company for more information about this.

ANSWER 4

What is the first thing you do in case of a hydrogen sulfide alarm?

A. Go to your HSE Manager and report the incident.

B. Immediately stop all work, leave your workplace and report to your HSE Manager.

C. Report the incident immediately, raise the alarm and immediately put on an escape mask.
Ask your company for more information about this.

QUESTION 5

What should you be aware of before you start working at a hydrogen sulfide location?

- A. You must be familiar with the hazards of hydrogen sulfide. You must have permission to enter the location.
- B. You must be familiar with the hazards of hydrogen sulfide. You should not attempt any rescue actions if you do not have respiratory equipment or if you are alone.
- C. You must be familiar with the hazards of hydrogen sulfide. You should have notified a doctor beforehand of the nature of your work.

ANSWER 5

What should you be aware of before you start working at a hydrogen sulfide location?

A. You must be familiar with the hazards of hydrogen sulfide. You must have permission to enter the location.

B. You must be familiar with the hazards of hydrogen sulfide. You should not attempt any rescue actions if you do not have respiratory equipment or if you are alone.

C. You must be familiar with the hazards of hydrogen sulfide. You should have notified a doctor beforehand of the nature of your work.