

# HYDROGEN SULFIDE (H<sub>2</sub>S)

Chemical Names:

Hydrogen Sulfide, Hydrosulfuric Acid, "Sour Gas"

Chemical Family:

Inorganic Acid Gas (Poisonous), Nonmetal Hydride

Extinguishing Media for H<sub>2</sub>S fires:

Water spray, fog or regular foam. Small fires: let burn unless leak can be stopped immediately. Cool containers, surrounding equipment and structures with water.

Special Fire Fighting Procedures and Precautions:

**EXTREMELY FLAMMABLE & POISONOUS! WEAR FULL PROTECTIVE CLOTHING INCLUDING NIOSH/MSHA APPROVED SELF-CONTAINED BREATHING APPARATUS.**

Unusual Fire and Explosion Hazards:

H<sub>2</sub>S vapor can travel considerable distances to a source of ignition and flash back explosively. Gives off corrosive and poisonous oxides of sulfur (SO<sub>2</sub>, SO<sub>3</sub>) upon combustion.

Health Hazards :

**Extremely hazardous gas!** Do **NOT** depend on sense of smell for warning - H<sub>2</sub>S causes rapid deterioration of sense of smell.

0.02 ppm - Odor threshold

10.0 ppm - Eye irritation

100 ppm - Headache, dizziness, vomiting, coughing.

200 to 300 ppm - Eye inflammation, respiratory tract irritation after 1 hour exposure.

500 to 700 ppm - Loss of consciousness or possible death in 30 minutes to an hour.

700 to 900 ppm - Rapid loss of consciousness; death can result.

Over 1000 ppm - Unconsciousness in seconds; death in minutes unless victim is removed from contaminated area and breathing is restored.