

# Effects of Hydrogen Sulfide H<sub>2</sub>S

| PPM       | EFFECT TIME  |
|-----------|--|
| .00011-33 | Typical background concentrations.   |
| 0.01-1.5  | Odor threshold – rotten egg smell.   |
| 10        | Permissible Exposure Level – 8 Hours.  |
| 20 -30    | Possible fatigue, loss of appetite, headache, irritability, poor memory, dizziness. Intense odor. Above 30ppm odor is sweet or sickeningly sweet.                                    |
| 50 -100   | Mild Irritation - eyes, throat – 1 Hour.   |
| 100       | Coughing, eye irritation, loss of smell 2-15 minute. Altered breathing, drowsiness 15-30 minutes. Throat irritation 1 hour. Symptom severity increases. Hemorrhage & Death 48 hours. |
| 100-150   | Loss of smell (olfactory fatigue or paralysis).  |
| 200-300   | Significant Irritation. Marked conjunctivitis & respiratory tract – 1 Hour. Pulmonary edema may occur from prolonged exposure 48 hours.  |
| 500 - 700 | Staggering, unconsciousness in 5 minutes. Serious eye damage, 30 minutes.<br><b>Death 30-60 minutes.</b>   |
| 700-1000  | Rapid unconsciousness, "knockdown" or immediate collapse 1 to 2 breaths. Breathing stops. <b>Death within minutes.</b>   |
| >1000     | <b>Nearly instant Death.</b>   |



This material was produced under grant number SH-27664-SH5 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.