

Hydrogen

SAFETY TIPS FOR INDUSTRIAL SETTINGS

VENTILATE HIGH SPACES



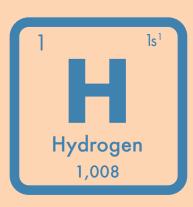
Hydrogen has a low minimum ignition energy (0.016 mJ) and wide flammable limits (4-75% in air), so it is very easy to ignite under any circumstances. Look up, because hydrogen is lighter than air and can collect at high points of the ceiling or roofline.

SAFELY RELIEVE PRESSURE

Many well-known chemical reactions off-gas hydrogen, creating an over-pressure in closed containers and processing equipment. Make sure you have emergency relief devices installed and they vent to a safe location, away from where people are working.



JET FIRES ARE HARD TO SEE



Hydrogen can ignite because of friction or static while it escapes a pinhole opening. It burns cleanly in air and the flame can be white, blue or nearly invisible, and this results in people mistakenly contacting the flame. Use remote heat sensing equipment before entering a space that may have a hydrogen leak.

FIRES CAN BE BETTER THAN EXPLOSIONS

If a hydrogen leak results in a continuous jet fire, call for help and do not try to put out the flame. If it's being burned off as it escapes, hydrogen cannot collect in an enclosed space and cause an explosion. Trained personnel should be contacted as soon as possible to advise what to do.



To learn more about the Hydrogen basis of safety and to protect your workers, facilities, emergency responders, neighborhoods and community contact the DEKRA Process Safety Team.

CONTACT US

DEKRA Process Safety North America www.dekra.us/process-safety

