<https://www.energy.gov/eere/fuelcells/hydrogen-storage#:~:text=Hydrogen%20can%20be%20stored%20physically,pressure%20is%20%E2%88%92252.8%C2%B0C>.

High pressure tank (5000-10000 psi tank) for gaseous hydrogen

Most common is large volume gaseous storage

Research is being done for advanced high pressure storage systems 10000+ psi

<https://www.energy.gov/eere/fuelcells/hydrogen-storage-basics-0>

Hydrogen can also be stored in solids

Larger quantities in smaller volumes at low pressure and close to room temperature

Materials based storage uses solids or liquids to absorb or react with hydrogen to bind to it

Ammonia can be used and its energy density by volume is double liquefied hydrogen