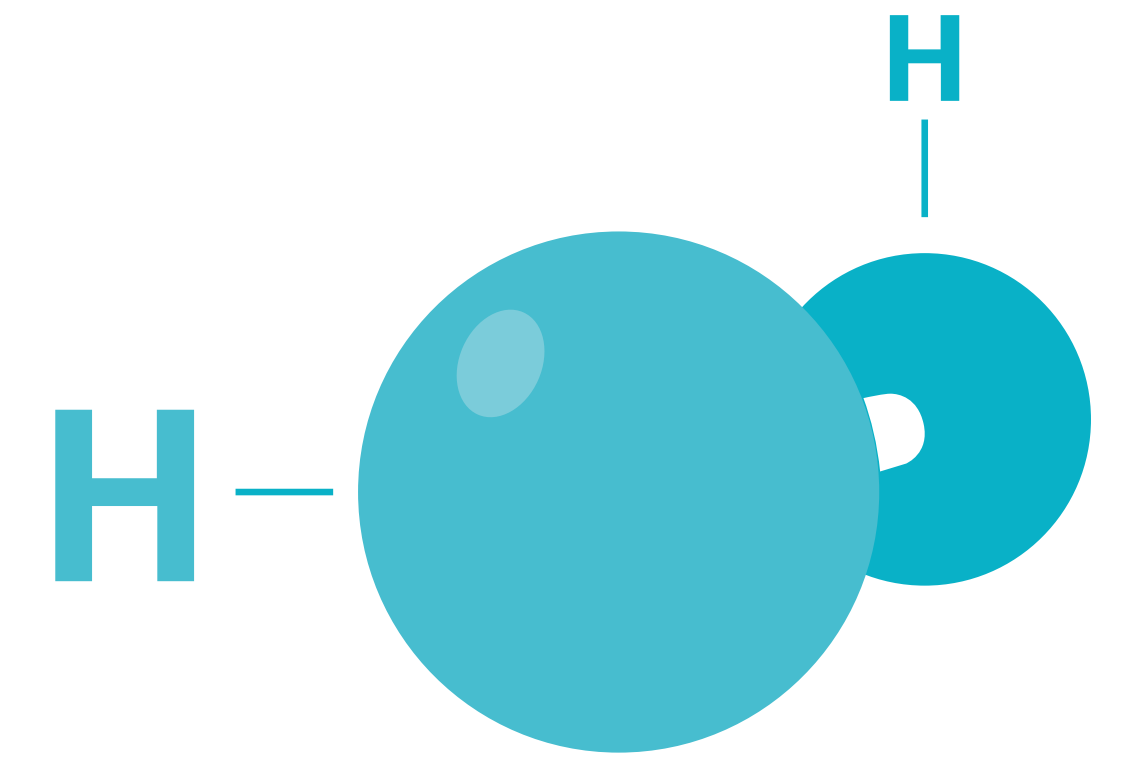


THE PROPERTIES OF HYDROGEN

Hydrogen is the most abundant element in the universe. It is a chemical element with symbol H and atomic number 1. Discover the main properties of hydrogen below.

HYDROGEN MOLECULE



In nature, hydrogen exists as a molecule **CONSISTING OF 2 ATOMS**

DIFFUSIVITY AND CONDUCTIVITY¹

Diffusivity in air: 0.61 cm²/s

Thermal conductivity: 187 mW/(m.K)

HEATING VALUES

Lower Heating Value (LHV): 119.93 kJ/g
10.05 MJ/Nm³

Higher Heating Value (HHV): 141.86 kJ/g
11.89 MJ/Nm³

$H_2 + \frac{1}{2} O_2$

HHV ↓ $H_2O(l)$

LHV ↓ $H_2O(g)$


Energy released during combustion

1 1.0079

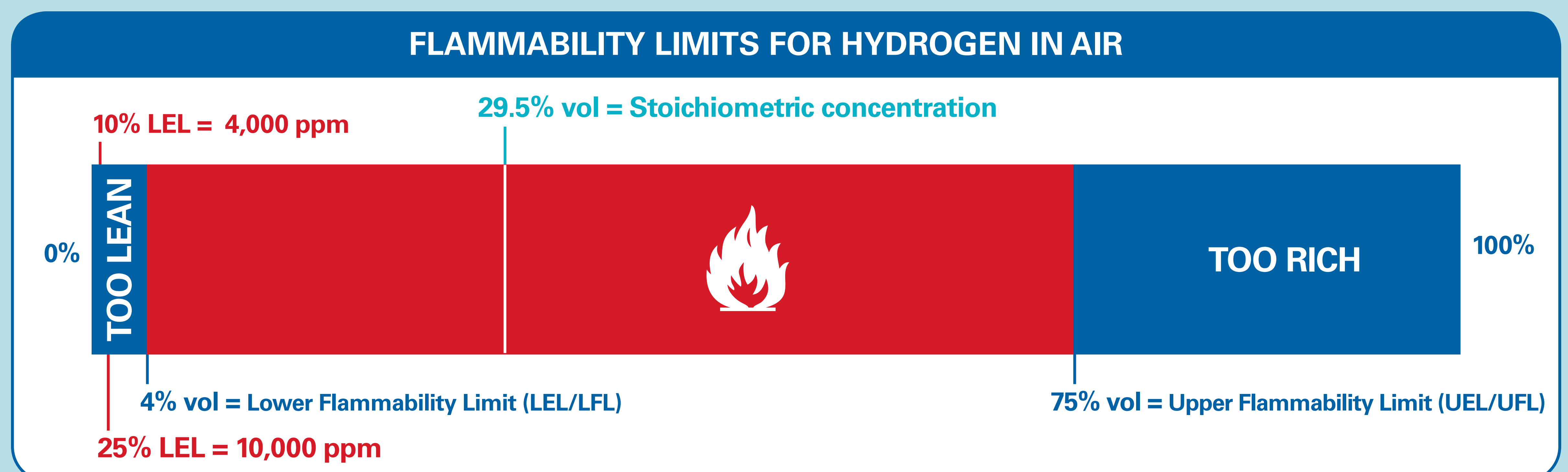
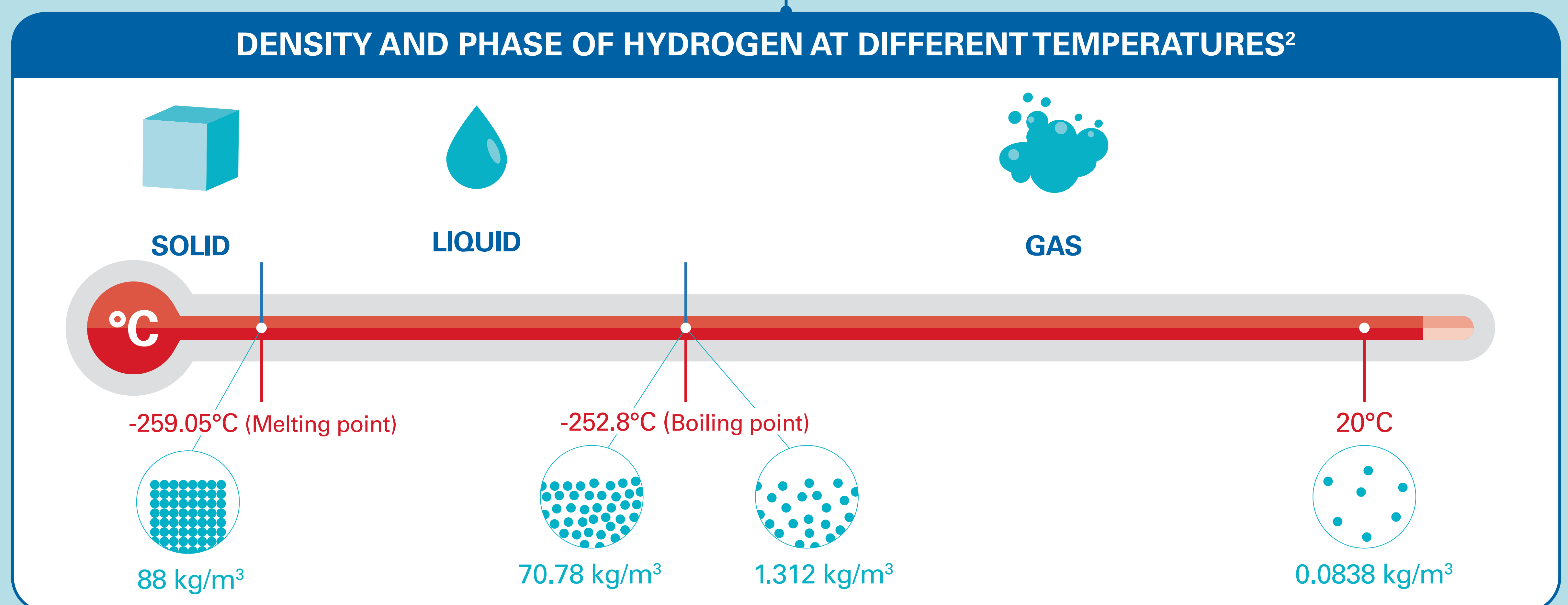
H

Hydrogen

MOLECULAR MASS



2.016 g/mol



1. NTP (20 °C, 1 atm) 2. Pressure = 1 atm

Do you want to learn more about hydrogen?

Visit www.kiwa.nl/hydrogen ✉ technology@kiwa.com ☎ +31 (0)88 988 35 21

