

Marking

CAS

Characterization acc. ADR

Cylinder Marking

1333-74-0
UN 1049 HYDROGEN,
COMPRESSED, 2.1, (B/D)



Shoulder color: red

Essential properties

compressed gas, lighter than air, colorless, odorless, flammable

Symbols of risks



Physical Properties

| | |
|----------------------------------|--------------------------|
| molecular weight | 2,0158 kg/kmol |
| gas density at 0°C and 1,013 bar | 0,0899 kg/m ³ |
| density ratio to air | 0,0695 |

For additional safety information see safety data sheet *-H2-067A

Valves / Manifolds

Valve connection

200 bar: acc. to national standards
300 bar: acc. to ISO 5145: W 30 x 2 LH

Recommended Manifolds

Spectrolab FM 51 / FM 52exact
Spectrochem FE 51 / FE 52exact



| Specification / receptacles | | | | | | |
|-----------------------------|---|--------------|--------------|--------------|--------------|--------|
| | | Hydrogen 5.0 | Hydrogen 5.6 | Hydrogen ECD | Hydrogen 6.0 | |
| Composition | | | | | | |
| H ₂ | ≥ | 99.999 | 99.9996 | 99.9996 | 99.9999 | Vol.-% |
| Impurities | | | | | | |
| O ₂ | ≤ | 1 | 1 | 1 | 0.2 | ppmv |
| N ₂ | ≤ | 5 | 2 | 2 | 0.2 | ppmv |
| HC (as CH ₄) | ≤ | 0.1 | 0.1 | 0.1 | 0.1 | ppmv |
| CO + CO ₂ | ≤ | 0.1 | 0.1 | 0.1 | 0.1 | ppmv |
| H ₂ O | ≤ | 5 | 2 | 2 | 0.5 | ppmv |
| halogenated HC | ≤ | - | - | 1 | - | ppbv |

Remarks

Applications:

Carrier gas in gas chromatography and fuel gas for flame ionisation detectors (FID).
Shielding gas and cooling gas in metallurgy and glass industries.

Contents in m³ at 15°C, 1 bar