

Marking

CAS-Number	1333-74-0
Characterization acc. ADR	UN 1049, Hydrogen, compressed, 2.1 Class 2, 1F

Cylinder Marking



shoulder:
red

Essential properties

Colourless, odorless, flammable gas, compressed, very much lighter than air

Symbols of Risks



extremely flammable



gas, compressed

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 Material-/safety data sheet No. *-H2-067A

Valves / Manifolds

Valve connection	200 bar: acc. to national standards 300 bar: acc. to ISO 5145: W 30 x 2 LH
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Recommended Manifolds	Spectrolab FM 51 / FM 52exact Spectrocem FE 51 / FE 52exact
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Specifications / Forms of delivery

		5.0	5.6 *	ECD	6.0	
Composition						
H ₂	>	99,999	99,9996	99,9996	99,9999	Vol.-%
Impurities						
H ₂ O	<	5	2	2	0,5	ppmv
O ₂	<	1	1	1	0,2	ppmv
N ₂	<	5	2	2	0,2	ppmv
THC (as CH ₄)	<	0,1	0,1	0,1	0,1	ppmv
CO + CO ₂	<	0,1	0,1	0,1	0,1	ppmv
hal. HC	<	-	-	1	-	ppb
Cylinders / Contents						
F 10 200 bar		1,8	-	-	1,8	m ³
F 50 200 bar		8,9	8,9	8,9	8,9	m ³
F 50 300 bar		12,6	-	-	-	m ³
B 12* F 50 200 bar		107,0	-	-	-	m ³
B 12* F 50 300 bar		151,3	-	-	-	m ³

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

*: not available in each country