

Marking

CAS-Number 74-84-0

Characterization acc. ADR UN 1035, Ethane, 2.1
Classe 2, 2F

Cylinder Marking



shoulder:
red

Essential properties

Colourless, odorless, narcotic, flammable gas, liquefied, lighter than air

Symbols of Risks



highly flammable



gas, compressed

Physical Properties

molecular weight: 30,069 kg/kmol
 gas density at 0°C and 1,013 bar: 1,3551 kg/m³
 density ratio to air: 1,0481
 vapour pressure at 20°C: 37,64 bar

For additional safety information see Material-/safety data sheet No. *-C2H6-051A

Valves / Manifolds

Valve connection acc. to national standards

Recommended Manifolds Spectrolab control valve PN 40
Spectrolab FM 51 / FM 52exact



Specifications / Cylinders				
		2.5	3.5	
Composition				
C ₂ H ₆	>	99,5	99,95	Vol.-%
Impurities				
O ₂	<	25	10	ppmv
N ₂	<	100	40	ppmv
CO ₂	<	-	5	ppmv
H ₂ O	<	-	5	ppmv
other HC	<	4000	400	ppmv
Cylinders / Contents				
F 10		3,0	3,0	kg
F 50		15,0	15,0	kg

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Description

Colourless, odorless, narcotic, highly flammable, liquified gas. Forms explosive mixtures in air.

detection Detector for flammable gases

Safety data

Explosion Range 2,4 - 14,3 Vol. %
Ignition Temperature 515 °C

Materials

Cylinders and Valves: any usual materials
Seals: PTFE, PCTFE, PVDF, PA, PP, NBR, FKM

Physical Properties

molecular weight	30,069 kg/kmol	vapour pressure at 20°C	37,64 bar
Critical Point		gas density at 0°C and 1,013 bar	1,3551 kg/m ³
temperature	305,330 K	density ratio to air	1,0481
Pressure	48,714 bar	gas density at 15°C and 1 bar	1,2656 kg/m ³
density	0,2045 kg/l	Conversion Factor	
Triple Point		liquid at Ts to m ³ gas (15°C, 1 bar)	0,43
temperature	90,348 K	Virial Coefficient	
Pressure	1,1308*10 ⁻⁵ bar	Bn at 0°C	-9,88*10 ⁻³ bar ¹
Boiling Point		B30 at 30°C	-7,18*10 ⁻³ bar ¹
temperature	184,55 K; -88,6 °C	Gaseous State at 25°C and 1 bar	
liquid density	0,5441 kg/l	specific heat capacity cp	1,757 kJ/kg K
evaporation heat	488,5 kJ/kg	thermal conductivity	212*10 ⁻⁴ W/m K
		dynam. viscosity	9,43*10 ⁻⁶ Ns/m ²