

Marking

CAS

74-98-6
UN 1978 PROPANE, 2.1, (B/D)

Characterization acc. ADR

Cylinder Marking



Shoulder color: red

Essential properties

liquified gas, heavier than air, colorless, odorless, flammable

Symbols of risks**Physical Properties**

molecular weight	44,096 kg/kmol
gas density at 0 °C and 1,013 bar	2,0098 kg/m ³
density ratio to air	1,554
vapour pressure at 20 °C	8,367 bar

For additional safety information see safety data sheet *-C3H8-104

Valves / Manifolds

Valve connection

acc. to national regulations



Recommended Manifolds

Spectrolab control valve PN 40

Specification / receptacles				
		Propane 2.5	Propane 3.5	
Composition				
C ₃ H ₈	≥	99.5	99.95	Mol-%
Impurities				
CO ₂	≤	100	5	ppm
O ₂	≤	200	10	ppm
N ₂	≤	400	40	ppm
other HC	≤	4,500	450	ppm
H ₂ O	≤	50	10	ppm

Remarks

Applications:

Fuel gas for barbeques and portable stoves

Fuel gas for laboratory burners

Research for polymerisation catalysts

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Essential properties

liquefied gas, heavier than air, colorless, odorless, flammable

Symbols of risks

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Description

Colourless, highly flammable liquefied gas. Forms explosive mixtures in air.

MaterialsCylinders and valves: any usual materials
Seals: PTFE, PCTFE, PVDF, PA, PP, NBR, FKM

Physical Properties			
molecular weight	44,096 kg/kmol	vapour pressure at 20°C	8,367 bar
critical point		gas density at 0°C and 1,013 bar	2,0098 kg/m ³
temperature	369,850 K	density ratio to air	1,554
Pressure	42,477 bar	gas density at 15°C and 1 bar	1,874 kg/m ³
density	0,220 kg/l	conversion factor	
triple point		liquid at Ts to m ³ gas (15°C, 1 bar)	3,244
temperature	85,45 K	virial coefficient	
Pressure	1,96*10 ⁻⁹ bar	Bn at 0°C	-20,87*10 ⁻³ bar ⁻¹
boiling point		B30 at 30°C	-14,79*10 ⁻³ bar ⁻¹
temperature	231,08 K; -42,1 °C	gaseous state at 25°C and 1 bar	
liquid density	0,5812 kg/l	specific heat capacity cp	1,696 kJ/kg K
evaporation heat	425,4 kJ/kg	thermal conductivity	180*10 ⁻⁴ W/m K
		dynam. viscosity	8,3*10 ⁻⁶ Ns/m ²