

2-Methyl propane

## Marking

CAS

Characterization acc. ADR

Cylinder Marking

75-28-5  
UN 1969 ISOBUTANE, 2.1,  
(B/D)



Shoulder color: red

## Essential properties

liquified gas, heavier than air, colorless, flammable

## Symbols of risks



## Physical Properties

molecular weight	58,123 kg/kmol
gas density at 0 °C and 1,013 bar	2,6956 kg/m <sup>3</sup>
density ratio to air	2,0849
vapour pressure at 20 °C	3,019 bar

For additional safety information see safety data sheet \*-C4H10-075

## Valves / Manifolds

Valve connection

acc. to national regulations



Recommended Manifolds

Spectrolab control valve PN 40

Specification / receptacles				
		Isobutane 2.5	Isobutane 3.5	
<b>Composition</b>				
i-C <sub>4</sub> H <sub>10</sub>	≥	99.5	99.95	Vol.-%
<b>Impurities</b>				
C <sub>4</sub> H <sub>10</sub>	≤	3,000	300	ppmv
O <sub>2</sub>	≤	100	5	ppmv
N <sub>2</sub>	≤	400	20	ppmv
other HC	≤	2,000	200	ppmv
H <sub>2</sub> O	≤	10	5	ppmv
<b>Cylinder / Contents</b>				
F 10 4,9kg		4.9	4.9	kg
F 50 24,5kg		24.5	24.5	kg

## Remarks

Applications:

Propellant in aerosol cans or foam products

Refrigerant (R 600a)

2-Methyl propane

## Marking

CAS

Characterization acc. ADR

Cylinder Marking

75-28-5  
UN 1969 ISOBUTANE, 2.1,  
(B/D)



Shoulder color: red

## Essential properties

liquified gas, heavier than air, colorless, flammable

## Symbols of risks



For additional safety information see safety data sheet \*-C4H10-075

## Description

Colourless, highly flammable, liquified gas with slightly sweet odor. Forms explosive mixtures in air.

## Materials

Cylinders and valves: any usual materials

Seals: PTFE, PCTFE, PVDF, PA, PP, NBR, CR, FKM

Physical Properties			
molecular weight	58,123 kg/kmol	vapour pressure at 20°C	
critical point		gas density at 0°C and 1,013 bar	2,6956 kg/m <sup>3</sup>
temperature	407,850 K	density ratio to air	2,0849
Pressure	36,9 bar	gas density at 15°C and 1 bar	2,5060 kg/m <sup>3</sup>
density	0,2244 kg/l	conversion factor	
triple point		liquid at Ts to m <sup>3</sup> gas (15°C, 1 bar)	
temperature	113,550 K	virial coefficient	
Pressure	1,9481*10 <sup>-7</sup> bar	Bn at 0°C	-37,9*10 <sup>-3</sup> bar <sup>-1</sup>
boiling point		B30 at 30°C	-27,1*10 <sup>-3</sup> bar <sup>-1</sup>
temperature	261,54 K; -11,6 °C	gaseous state at 25°C and 1 bar	
liquid density	0,5937 kg/l	specific heat capacity cp	1,698 kJ/kg K
evaporation heat	366,7 kJ/kg	thermal conductivity	159,6*10 <sup>-4</sup> W/m K
		dynam. viscosity	7,52*10 <sup>-6</sup> Ns/m <sup>2</sup>