

Marking**CAS-Number**

124-38-9

Characterization acc. ADRUN 1013, Carbon dioxide, 2.2
Class 2, 2A**Cylinder Marking**shoulder:
grey, body olive yellow**Essential properties**

Colourless, asphyxiating, liquified gas with slightly sourish smell inf resp. taste, heavier than air

Symbols of Risks

gas, compressed

Physical Properties

molecular weight:	44,0098 kg/kmol
gas density at 0°C and 1,013 bar:	1,9767 kg/m ³
density ratio to air:	1,5289
vapour pressure at 20°C:	57,258 bar

For additional safety information see Material-/safety data sheet No. *-CO2-018A

Valves / Manifolds**Valve connection**acc. to national standards
Valve with bursting disc**Recommended Manifolds**

Spectrolab FM 51 / FM 52exact

**Specifications / Forms of delivery**

		Gourmet C	
Composition			
CO ₂	>=	99	Vol.-%
Impurities*			
CO	<=	10	ppmv
Oil	<=	5	mg/kg
Cylinders / Contents			
F 10		7,5	kg
F 13,4		10,0	kg
F 27		20,25	kg
F 50		37,5	kg
B 12 * F 50		450,0	kg

Remarks

Carbon dioxide is approved as a foodstuff by EU.
The usage of Gourmet-C-cylinders is permitted only for exertion in the area of foodstuff.
Any cylinder is marked with a lot number.
The stability is 3 years beginning at filling date.
Cylinders with and without dip tube available.

Regulation 231/2012 of EU-Commission / March 9th, 2012

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Description

Colourless, liquified gas with slightly sourish smelling resp. taste. During expansion the carbondioxide can be cooled down below sublimation temperature. This results in CO₂-snow(dry ice).

detection test tubes

Safety data

TLV 5000 ml/m³

Materials

Cylinders and Valves: any usual materials
In the presence of humidity danger of corrosion of steel
Seals: PTFE, PCTFE, PVDF, PA, PP

Physical Properties			
molecular weight	44,0098 kg/kmol	vapour pressure at 20°C	57,258 bar
Critical Point		gas density at 0°C and 1,013 bar	1,9767 kg/m ³
temperature	304,21 K	density ratio to air	1,5289
Pressure	73,825 bar	gas density at 15°C and 1 bar	1,8474 kg/m ³
density	0,466 kg/l	Conversion Factor	
Triple Point		liquid at Ts to m ³ gas (15°C, 1 bar)	
temperature	216,58 K	Virial Coefficient	
Pressure	5,185 bar	Bn at 0°C	-6,64*10 ⁻³ bar ⁻¹
Boiling Point		B30 at 30°C	-4,78*10 ⁻³ bar ⁻¹
temperature	194,674 K; -78,5 °C	Gaseous State at 25°C and 1 bar	
liquid density	(sublimation point)	specific heat capacity cp	0,8504 kJ/kg K
evaporation heat	573,02 kJ/kg	thermal conductivity	164*10 ⁻⁴ W/m K
		dynam. viscosity	14,833*10 ⁻⁶ Ns/m ²