

**Marking****CAS**

Characterization acc. ADR

**Cylinder Marking**124-38-9  
UN 1013 CARBON DIOXIDE,  
2.2,(C/E)

Shoulder color: grey

**Essential properties**

Liquified gas, heavier than air, colorless, odorless

**Symbols of risks**

For additional safety information see safety data sheet \*-CO2-018A

**Description**Colourless, liquified gas with slightly sourish smelling resp. taste. During expansion the carbondioxide can be cooled down below sublimation temperature. This results in CO<sub>2</sub>-snow (dry ice).**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			
<b>molecular weight</b>	44,0098 kg/kmol	<b>vapour pressure at 20°C</b>	
<b>critical point</b>		<b>gas density at 0°C and 1,013 bar</b>	1,9767 kg/m <sup>3</sup>
temperature	304,21 K	<b>density ratio to air</b>	1,5289
Pressure	73,825 bar	<b>gas density at 15°C and 1 bar</b>	1,8474 kg/m <sup>3</sup>
density	0,466 kg/l	<b>conversion factor</b>	
<b>triple point</b>		liquid at Ts to m <sup>3</sup> gas (15°C, 1 bar)	
temperature	216,58 K	<b>virial coefficient</b>	
Pressure	5,185 bar	Bn at 0°C	-6,64*10 <sup>-3</sup> bar <sup>-1</sup>
<b>boiling point</b>		B30 at 30°C	-4,78*10 <sup>-3</sup> bar <sup>-1</sup>
temperature	194,674 K; -78,5 °C	<b>gaseous state at 25°C and 1 bar</b>	
<b>liquid density</b>	(Sublimationspunkt)	specific heat capacity cp	0,8504 kJ/kg K
evaporation heat	573,02 kJ/kg	thermal conductivity	164*10 <sup>-4</sup> W/m K
		dynam. viscosity	14,833*10 <sup>-6</sup> Ns/m <sup>2</sup>