PURE GASES

Marking

CAS-Number 124-38-9

Characterization acc. ADR

UN 1013, Carbon dioxide, 2.2

Class 2, 2 A

Cylinder Marking



shoulder: grey

Essential properties

Colourless, odorless, asphyxiating gas, liquified, 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/m³ 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

liquid withdrawal trough dip tube for any

SFC/SFE-products

Recommended Manifolds Spectrolab FM 51 / FM 52exact

Spectrocem FE 51 / FE 52exact For SFC/SFE-products: withdrawal fittings (without pressure reduction)



Specifications /	Forms of	delivery				
		4.5	4.8	5.5 SFC/SFE	5.5 SFC/SFE with He-pressure head space	
Composition						
CO ₂	>	99,995	99,998	99,9995	99,9995 (125 bar He-pressure head space)	Vol%
Impurities*						
H ₂ O	<	5	3	-	-	ppmv
O_2	<	10	2	1	1	ppmv
N_2	<	25	8	2	2	ppmv
THC (as CH ₄)	<	1	1	0,5	0,5	ppmv
CO	<	1	1	0,5	0,5	ppmv
Cylinders / Conte	nts					
F 10		7,5	-	-	-	kg
F 40		30,0	-	30,0	18,0	kg
F 50		37,5	37,5	-	-	kg
Bdl 12 * F 50		450,0	-	-	-	kg

Remarks

Applications:

Active gas in CO₂-Lasers

Component in artificial biological atmospheres

Solvent for supercritical extraction and chromatography (SFE / SFC)

^{*} Analysis from evaporated liquid phase.