





PRODUCT ID

Formula	CO ₂	CAS nr.	124-38-9
Molecular weight (g/mol)	44.01	EC nr.	204-696-9

VISUAL CLASSIFICATIONS

Market	Energy Demand	Maturity	Price
			

KEY MARKET DATA

Market size (ton/year)	17 millions	Data from: 2015
Product price (€/ton)	80-150	
Production cost (€/ton)	30	Purification + liquefaction
CO ₂ uptake potential (ton/ton product)	1	
CO ₂ uptake potential (ton/year)	17 millions	20 reference plants 1.6% capture target (1.05Gt/year)
State-of-the-art production technology	Purification from CO ₂ -rich streams (95+ mol%)	

EIGA STANDARDS FOR THE COMPOSITION OF FOOD- AND BEVERAGE-GRADE CARBON DIOXIDE

Component	Concentration	Rationale
CO ₂	99,9% min.	
Moisture	20 ppmw max.	
Ammonia	2,5 ppmv max	Process
Oxygen	30 ppmv max	
Carbon Monoxide	10 ppmv max	
NO and NO ₂	2,5 ppmv max. each	
Phosphine	0,3 ppmv max	Regulatory
Benzene	0,02 ppmv max	
Methanol	10 ppmv max	
Hydrogen Cyanide	0,5 ppmv max	
Oil and grease	5 ppmw max	
Total volatile HCs	50 ppmv max. of which 20 ppmv max non-methane HCs	Sensory
Acetaldehyde	0,2 ppmv max	
Particulates	10 ppmw max	
Total Sulphur	0,1 ppmv max	

For sources and definitions, please consult the original report at the [CEMCAP WEBSITE](#)

