





PRODUCT ID, e.g. ETHYLENE CARBOANTE

Formula	C <sub>3</sub> H <sub>4</sub> O <sub>3</sub>	CAS nr.	96-49-1
Molecular weight (g/mol)	88.06	EC nr.	202-510-0

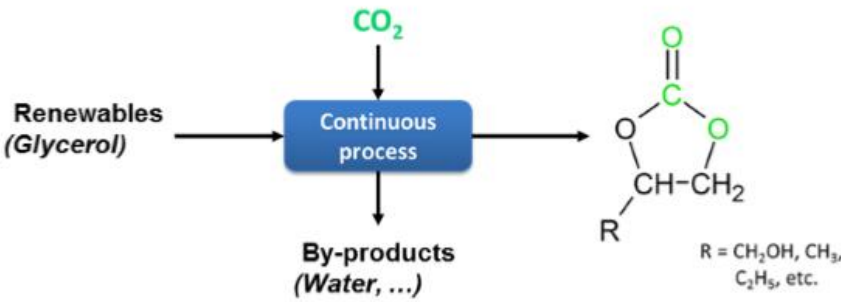
VISUAL CLASSIFICATIONS

Market	Energy demand	Maturity	Price
			

KEY MARKET DATA

Market size (ton/year)	0,1 millions	
Product price (€/ton)	2000	
CO <sub>2</sub> uptake potential (ton/ton product)	0.4	Stoichiometric, average
CO <sub>2</sub> uptake potential (ton/year)	0,04 millions	0,05 reference CEMCAP plants 0,004% capture target (1.05Gt/year)
State-of-the-art production technology	From CO <sub>2</sub> and epoxides (TRL 9). Route is a net emitter of CO <sub>2</sub> .	

TECHNOLOGY ROUTE

TRL = 3	Alternative routes are under development that would lead to net consumption of CO <sub>2</sub>	
Reactions		
		
Reaction conditions		
Temperature	50-180°C	
Pressure	30-50 bar	
Catalysts	zinc acetate + para-chlorobenzenesulfonic acid (several catalyst under development)	
CO <sub>2</sub> :H <sub>2</sub> molar ratio	1	stoichiometric
Solvent		

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

