

# THE DOZN™ SCALE



Based on the 12 Principles of Green Chemistry\*, DOZN helps researchers, scientists, and manufacturers increase performance and efficiency while reducing human and environmental impact.

\*Paul T. Anastas and John C. Warner, 1991.

## (±)-Diethyl trans-4-cyclohexene-1, 2-dicarboxylate (726095)

	12 Principles of Green Chemistry	Percentage of Improvement	Results
Resource Used	Atom Economy	81%	Increased yield. Used less raw materials
	Waste Prevention	86%	Reduced amount of raw materials
	Reduce Derivatives	N/A	
	Renewable Feedstocks Use	81%	Decreased amount of raw materials
	Real-Time Pollution Prevention	N/A	
	Catalyst	50%	Use of catalyst
Human & Environmental Hazards Reduction	Energy Efficiency Design	60%	Reduced chemical processing
	Less Hazardous Chemical Synthesis	93%	Reduced hazardous reaction conditions
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	N/A	
	Design for Degradation	3%	Reduced use of substance that degrades to environmentally hazardous materials
	Inherently Safer Chemical for Accident Prevention	79%	Reduced flammability and reactivity hazard

**TOTAL PERCENT IMPROVEMENT**

**63%**

**AGGREGATE SCORE**

0= Most Desirable



Re-engineered Score ← 8

Previous Score → 0

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