

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.

β-AMYLASE

An enzyme commonly found in sweet potatoes—hydrolyzes starch into sugar

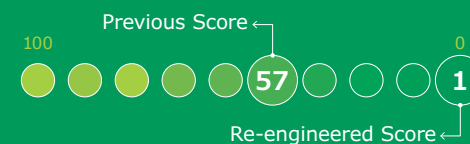
	12 Principles of Green Chemistry	Percentage of Improvement	Results
Resource Used	Atom Economy	93%	Increased yield. Used less raw materials.
	Waste Prevention	97%	Eliminated use of organic solvents. Reduced waste.
	Reduce Derivatives	N/A	
	Renewable Feedstocks Use	96%	More efficient sweet potato use. Reduced auxiliary chemicals.
	Real-Time Pollution Prevention	N/A	
	Catalyst	N/A	
Human & Environmental Hazards Reduction	Energy Efficiency Design	100%	Eliminated need for elevated temperature and pressure.
	Less Hazardous Chemical Synthesis	95%	Water-based solutions replaced organic solvents. Removed toxic filtering agents.
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	100%	Eliminated all organic solvents.
	Design for Degradation	No Change	No increased impact with new procedure.
	Inherently Safer Chemical for Accident Prevention	96%	Eliminated flammability and reactivity dangers.

TOTAL PERCENT IMPROVEMENT

98%

AGGREGATE SCORE

0= Most Desirable



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