## 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.

## Fumaric acid-1,4- $^{13}$ C<sub>2</sub>,2,3-d<sub>2</sub> (752576)

	12 Principles of Green Chemistry	Percentage of Improvement	Results
Human & Environmental Hazards Reduction Resource Used	Atom Economy	No change	
	Waste Prevention	No change	
	Reduce Derivatives	N/A	
	Renewable Feedstocks Use	No change	
	Real-Time Pollution Prevention	N/A	
	(Catalyst	N/A	
	Energy Efficiency Design	No change	
	Less Hazardous Chemical Synthesis	36%	Minimized the use of toxic chemicals
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	54%	Reduced solvent usage
	Design for Degradation	N/A	
3	Inherently Safer Chemical for Accident Prevention	36%	Reduced flammability and reactivity hazard

TOTAL PERCENT IMPROVEMENT



AGGREGATE SCORE 0 = Most Desirable

Re-engineered Score ←

Previous Score ←