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.*

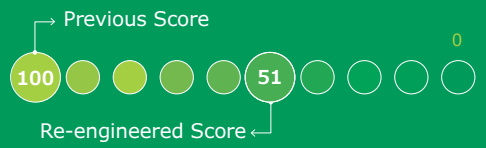
4-Nitrophenyl β-D-xylopyranoside (N2132)

	12 Principles of Green Chemistry	Percentage of Improvement	Results
Resource Used	Atom Economy	42%	Increased yield. Used less raw materials
	Waste Prevention	44%	Reduced waste by decreasing solvent usage
	Reduce Derivatives	N/A	
	Renewable Feedstocks Use	42%	Decreased amount of raw materials
	Real-Time Pollution Prevention	N/A	
	Catalyst	N/A	
	Energy Efficiency Design	56%	Reduced chemical processing
Human & Environmental Hazards Reduction	Less Hazardous Chemical Synthesis	38%	Reduced flammability and toxicity hazards
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	45%	Decreased usage of organic solvents
	Design for Degradation	N/A	
	Inherently Safer Chemical for Accident Prevention	30%	Reduced flammability hazards

TOTAL PERCENT IMPROVEMENT 49%

AGGREGATE SCORE

0= Most Desirable



The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.