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.*

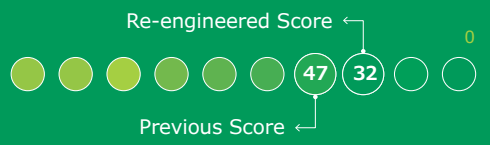
L-Phenyl-d_5-alanine (615870)

	12 Principles of Green Chemistry	Percentage of Improvement	Results
Resource Used	Atom Economy	18%	Increased yield. Used less raw materials
	Waste Prevention	No change	
	Reduce Derivatives	50%	Reduced derivatives
	Renewable Feedstocks Use	65%	Decreased amount of raw materials
	Real-Time Pollution Prevention	N/A	
	Catalyst	N/A	
	Energy Efficiency Design	No change	
Human & Environmental Hazards Reduction	Less Hazardous Chemical Synthesis	54%	Reduced hazardous reaction conditions
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	64%	Reduced solvent usage
	Design for Degradation	N/A	
	Inherently Safer Chemical for Accident Prevention	54%	Reduced flammability and reactivity hazard

TOTAL PERCENT IMPROVEMENT 32%

AGGREGATE SCORE

0 = Most Desirable



The Life Science business of Merck operates as MilliporeSigma in the U.S. and Canada.