

# 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.



## 3,3'''-Dihexyl-2,2':5',2'':5'',2'''- Quaterthiophene (694460)

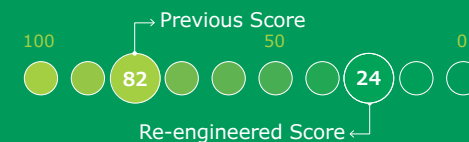
	12 Principles of Green Chemistry	Percentage of Improvement	Results
Resource Used	Atom Economy	42%	Decreased solvent usages while maintaining same yield
	Waste Prevention	49%	Decreased solvent usage
	Reduce Derivatives	N/A	
	Renewable Feedstocks Use	42%	Decreased amount of raw materials
	Real-Time Pollution Prevention	N/A	
	Catalyst	N/A	
Human & Environmental Hazards Reduction	Energy Efficiency Design	80%	Reduced chemical processing
	Less Hazardous Chemical Synthesis	31%	Reduced flammability and reactivity hazards
	Safer Chemical Design	N/A	
	Safer Solvents and Auxiliaries	47%	Decreased organic solvent usage
	Design for Degradation	N/A	
	Inherently Safer Chemical for Accident Prevention	29%	Eliminated use of corrosive reagents

**TOTAL PERCENT IMPROVEMENT**

**71%**

**AGGREGATE SCORE**

0= Most Desirable



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

© 2020 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M and DOZN are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. 2020 - 32017