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MilliporeSigma, USA

DOZN[™]- A quantitative green chemistry evaluator

MilliporeSigma created a unique web-based greener alternative scoring matrix, also known as DOZN™- A Quantitative Green Chemistry Evaluator based on the 12 principles of green chemistry. The 12 principles of green chemistry provide a framework for learning about green chemistry and designing or improving materials, products, processes and systems. DOZN™ scores products based on metrics for each principle and aggregates the principle scores to derive a final aggregate score. The system calculates scores based on manufacturing inputs, Globally Harmonized System (GHS) and Safety Data Sheet (SDS) information which provide a green score for each substance and is flexible enough to encompass a diverse portfolio of products ranging from chemistry to biology based products. The DOZN™ system has also been verified and validated by a third party to ensure best practices are applied. This new Greener Chemistry initiative offer customers' an increased breadth of Greener Alternative products with confirmatory documentations to validate greener characteristics.

Biography

Ettigounder Ponnusamy, As a founder of Sigma-Aldrich's Green Chemistry team in 2007, developing MilliporeSigma's Corporate Green Chemistry initiatives, managing/expanding new Green Business Opportunities, Greener Alternatives R&D and greener product developments. Developed an unique and state of the art Quantitative Green Chemistry Evaluator, DOZN system based on the Twelve Green Chemistry Principles. Also have extensive experiences in applying concepts of Polymer/Organic Chemistry and process technology skills for developing new and innovative bio-polymers for drug delivery applications. I have managed product developments to successfully introduce new products that have recorded sustained growth (>\$50 millions). Have extensive knowledge in managing product developments ments from bench scale through product launch.

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