

# 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.

## tert-Butan-d<sub>9</sub>-ol (614998)

|                                         | 12 Principles of Green Chemistry                  | Percentage of Improvement  | Results                                 |
|-----------------------------------------|---------------------------------------------------|----------------------------|-----------------------------------------|
| Resource Used                           | Atom Economy                                      | <div><div></div></div> 83% | Reduced quantity of raw materials       |
|                                         | Waste Prevention                                  | No Change                  |                                         |
|                                         | Reduce Derivatives                                | NA                         |                                         |
|                                         | Renewable Feedstocks Use                          | <div><div></div></div> 83% | Reduced auxiliary chemicals and solvent |
|                                         | Real-Time Pollution Prevention                    | NA                         |                                         |
|                                         | Catalyst                                          | No Change                  |                                         |
| Human & Environmental Hazards Reduction | Energy Efficiency Design                          | <div><div></div></div> 95% | Reduced chemical processing             |
|                                         | Less Hazardous Chemical Synthesis                 | <div><div></div></div> 80% | Eliminated hazardous solvents           |
|                                         | Safer Chemical Design                             | NA                         |                                         |
|                                         | Safer Solvents and Auxiliaries                    | NA                         |                                         |
|                                         | Design for Degradation                            | NA                         |                                         |
|                                         | Inherently Safer Chemical for Accident Prevention | <div><div></div></div> 84% | Minimized reactivity risk               |

TOTAL PERCENT IMPROVEMENT

78%

AGGREGATE SCORE

0 = Most Desirable

Re-engineered Score ← 0

32 7

Previous Score ←

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