

Govt extends financial support to Clearsynth Labs to establish bulk manufacturing facility for deuterated reagents

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Deuterated compounds are witnessing increasing global demand across sectors such as pharmaceuticals



In a decisive step towards building India's capabilities in advanced specialty chemicals, the Technology Development Board (TDB), under the Department of Science and Technology (DST), Government of India, has extended financial support to Mumbai-based Clearsynth Labs for setting up a dedicated manufacturing facility for the commercial-scale production of deuterated reagents and building blocks.

The non-nuclear applications of deuterium are increasingly finding traction across industries. Bulk manufacturing of deuterated reagents and building blocks is becoming increasingly important globally, as other than the use of Deuterium labelled compounds for clinical research applications and Pharma research, it has potential application in medicinal chemistry and non-medicinal industrial sectors of the market.

Currently, India imports the majority of deuterated solvents. The initiative comes at a time when deuterated compounds are witnessing increasing global demand across sectors such as pharmaceuticals, OLEDs, semiconductors, and fiber optics. Despite India's robust pharmaceutical manufacturing base, most Indian manufacturers are geared for standard APIs, not isotope-labelled compounds. The country has remained reliant on imports in this strategically important yet niche segment due to the lack of scalable, high-purity production technologies within the domestic ecosystem. This project is a transformative move to strengthen domestic capabilities in high-value chemicals for pharma, OLED, semiconductors, and fiber optics.

The new facility, backed by TDB, will serve high-end global and domestic customers engaged in pharmaceutical research, complex chemical synthesis, and advanced industrial applications.