



## **CYPRUS 2025**

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### **Successful demonstration of Indigenous Technology to produce Dearomatized Solvents - HP-DAK**

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#### **Abstract**

Low aromatic solvents are specially formulated solvents free from aromatics and unsaturated hydrocarbons, almost odorless, clear and colorless liquids with several applications such as drilling fluids, paint solvents, metal working fluids, mosquito repellants, lube formulations etc. Worldwide there is huge demand for such low aromatic solvents.

These solvents are obtained from refinery streams and technology for producing the solvents are available with major suppliers. The Indian market demand for low aromatic solvents is expected to increase to ~110 KTPA by 2028 and ~200 KTPA by 2048.

The major specifications for these solvents include low aromatics content i.e., < 100 ppm and higher flash point i.e., > 80 Deg C. HPGRDC has developed a patented technology namely HP-DAK for producing low aromatic solvents from a stream from Lube producing plant of Mumbai Refinery (MR).

A demonstration plant of 52 KTPA is successfully commissioned at Mumbai Refinery in January 2025 with a capital cost of ~90 Cr for producing 5 different grades of value-added products. Catalyst for this plant is developed at R&D and scaled-up. Reactor design along with internals is based on patented in-house knowhow.

The plant is set-up in a small area of 550 m<sup>2</sup> and successfully produced 2 grades of products and they are used in formulations internally and also at customer locations. The process design package and the end-to-end design and engineering is done in-house.

This indigenous technology HP-DAK, will reduce imports of low aromatic solvents and make India Atmanirbhar for producing low aromatic solvents and also generate additional revenue to corporation.