

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO - 4052
ANSWERED ON 12/08/2026

HEAVY WATER FOR NON-NUCLEAR APPLICATIONS

4052. SHRI JUGAL KISHORE
SHRI KRISHNA PRASAD TENNETI

Will the PRIME MINISTER be pleased to state:-

- (a) the details of the steps taken by the Government to expand the production and utilisation of Heavy Water for non-nuclear applications;
- (b) the names of sectors including healthcare, research and industrial applications in which Heavy Water is being utilized;
- (c) the details of the initiatives taken by the Government to enhance domestic and international demand of Heavy Water technologies related to it; and
- (d) the details of the future action plan formulated by the Government to strengthen research, innovation and value addition in Heavy Water based applications?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) to (d) Heavy Water Board(HWB) a constituent unit under Department of Atomic Energy initiated activities for expansion of Heavy Water production at two locations i.e. Manuguru (Telangana) and Hazira (Gujarat). Production of deuterated Nuclear Magnetic Resonance (NMR) solvents are carried out at Heavy Water Board Facilities, Vadodara for supply of Heavy Water to various institutes for research purposes.

The following is the list of the major sectors where Heavy Water is being utilized:

- (i) Nuclear Magnetic Resonance Spectroscopy (NMR) solvents
- (ii) Drug/Active Pharmaceutical Ingredients (APIs)
- (iii) Optical Fibre
- (iv) Semiconductor
- (v) Organic Light-Emitting Diode (OLED)

HWB promotes utilization of Heavy Water for development of deuterated compounds in India through collaborations with Indian Companies and Research Institutes/Academics. HWB is regularly exporting Heavy Water to various countries viz. USA, South Korea, Japan, Germany, Switzerland, France etc.

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