

Spherical RDX (SRDX)

High Energy Materials Research Laboratory (HEMRL), Pune, under Defence Research & Development Organisation (DRDO) has developed the technology for production of SRDX. SRDX is a white crystalline high energy material and has application in High Explosive and Rocket Propellant formulations. Unlike conventional RDX, the use of SRDX will reduce the vulnerability of high explosives /propellant formulation towards unintended shock stimuli. Owing to improved crystal morphology, the use of SRDX will also improve the process-abilities of both high explosives and propellant formulation. Preparation of SRDX is developed by adopting a specially designed chemical erosion technology. Process parametric conditions are optimised for desired particle size and morphology. SRDX prepared in this process is subjected for analysis and explosive characterization. The melting point of SRDX was observed to be about 205 ± 1 °C. The shock sensitivity of PBX compositions using this grade of SRDX results in improvement of shock sensitivity from 24 kbar to 48kbar. The technology is ready to be transferred to the suitable Govt./Pvt. agencies as per the prevailing policy and procedure of DRDO.

Contact Details

Interested companies/industries are requested to apply against this EoI through email or by DAK to following address:-

To,

The Director

High Energy Materials Research Laboratory

Govt. of India, Ministry of Defence

Pune-411 021

Email-director.hemrl@gov.in

Copy to,

The Director

Directorate of Industry Interface & Technology Management (DIITM)

Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011

Email-diitm.hqr@gov.in

Spherical RDX (SRDX)

List of Support documents to be attached with EoI

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, as amended time to time)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Audited Balance Sheet for the preceding three years.
- (d) Income Tax returns for the preceding three year period
- (e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI)/DIPP norms as applicable.
- (f) Annual budget for R&D during last three years.
- (g) Numbers and details of IPR or patents, etc., held by the company.
- (h) Number of technically or professionally qualified personnel.
- (i) Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.
- (k) List of Testing and Support equipment's
- (l) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries (if any)
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.
- (o) Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.
- (p) PESO and DPIIT license for explosive handling if ToT is for high energy Material, explosives, propellants, and component/ system dealing with it etc.
- (q) Under taking form company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, Key management personnel are involved in any corrupt practices, unfair means and illegal activities.
- (r) Details of the industrials license for defence manufacturing be provided by the industry seeking ToTs.