Reduced Sensitivity RS-RDX

HEMRL has developed the process technology for Reduced Sensitivity Cyclotrimethylene-trinitramine (RS-RDX) by systematic studies at laboratory level followed by bench scale and pilot plant level using drowning out re-crystallization method.

RS-RDX is a potential high energy material in the field of insensitive munitions (IM) which significantly reduces the shock sensitivity of various high explosive / propellant compositions. Emerging applications of RS-RDX are its use in propellant composition of HD1.1 category and IM compliant PBX formulation. Use of RS-RDX in propellant significantly improves the burn rate and enhances Isp by about 5% as well as reduces hazards and vulnerability associated with transportation and storage as compared to standard RDX based composition. In PBX based high explosive formulations, use of RS-RDX has significantly reduced the shock sensitivity by 70% without compromising the performance to any extent.

Interested Industries may respond along with their company profile, financial & technical capabilities etc as per the following format –

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, 1956)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) 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).
- (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 equipments
- (I) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries including relevant licenses for processing/ storing & production of explosives from DIPP & PESO
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.

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(o) Capacity/Capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.

Eligible parties will be evaluated as per the procedure in vogue for giving Transfer of Technology (TOT) on non-exclusive basis.

Interested industry may write to Director, HEMRL Pune on the following address -

Director, HEMRL
DRDO, Min. of Defence,
Sutarwadi
Pune – 411021
They may also contact on phone – (020) 25869316

or

Director, DIITM, DRDO HQ, Min. of Defence, DRDO Bhawan, Room No. 447, B Block, Rajaji Marg, New Delhi - 110011 Phone – 011 23013209