

Anti Microbial Bed Sheet

Over the past ten years, the importance of health has increased significantly, particularly with the ongoing Covid-19 pandemic. Due to a lack of indigenous producers, the medical textile industry in India is heavily dependent on imports; over 90% of all disposable hygiene and medical textiles are imported. Production of surgical gowns, surgical caps, surgical masks, blankets, surgical hosiery, and other items is implied by the manufacturing of medical textiles. Adopting healthy behaviours has increased dramatically, which is understandable given that doing so will boost immunity and general wellbeing.

The idea of antiviral coatings for clothing is not new. Before the epidemic, they were being used for items that catered to those with particular requirements. However, the growth of COVID-19 has raised demand for antiviral-finished fabrics. This is due to the fact that antiviral fabrics can reduce the number of virus particles that accumulate on the fabric's surface.

Along with other polymeric agents, medical textiles typically contain triclosan and cetyl ammonium bromide, which improve the anti-microbial efficacy by killing and inactivating microorganisms that bind to intracellular proteins. Defence Research Laboratory has created a brand-new method for producing cotton and polyester bed sheets that are antibacterial, antiviral, and washable for up to 20 washes using Ticrolosan and Cetyl Ammonium Bromide. The antimicrobial cotton bedsheets are constructed of nanofinished fabric with apolyester: cotton (50:50) blend for antimicrobial, antiviral and antifungal protection. When used against two representative pathogens, Klebsiella pneumoniae (ATCC 4352) and Staphylococcus aureus, the product limits bacterial growth by more than 99.99 percent (TCC 6538). The bed linens also demonstrate the H1N1 influenza A virus's (good) effects (ATCC VR-1679). The DRL antimicrobial bed linens offer an additional layer of defence against nosocomial infections for patients admitted to hospitals. In areas with a high risk of infection, such as burn wards, operating rooms, intensive care units, labour and delivery rooms, orthopaedic clinics, and isolation units, this product may also be appropriate for use.

Contact Details

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

To, (with all attachments)

Director

Defence Research Laboratory (DRL)

Govt. of India, Ministry of Defence

Defence R&D Organisation

Dekargaon, Tezpur (Assam)-784501

Email-director.drl @gov.in

Copy to (without attachments):-

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

List of supporting 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.