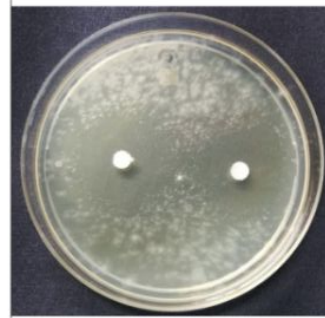
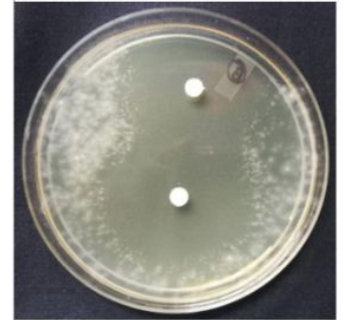


GRANTED**(IN497891)**

A lyotropic liquid crystalline nanoparticles based hydrogel of voriconazole for topical application

**Pure Drug (Voriconazole)****Voriconazole loaded LCNP**

NEED

Fungal infections affect millions, often requiring prolonged treatment with systemic antifungals. However, traditional treatments can cause toxicity or ineffective drug delivery. A more targeted, safer approach is needed for optimal treatment.

TECHNOLOGY OVERVIEW

This pharmaceutical composition uses lyotropic liquid crystalline nanoparticles (LCNPs) to encapsulate voriconazole, enhancing drug stability, permeation, and sustained release. The gel-forming hydrogel minimizes systemic toxicity, offering an effective treatment for fungal infections with controlled delivery.

TECHNOLOGY KEY FEATURES

Encapsulation in LCNPs for enhanced stability, sustained-release formulation, reduced systemic toxicity, inclusion of permeation enhancers, and pH modifiers for controlled release.

[Read more here](#)

MARKET ANALYSIS

The global antifungal drugs market is expected to grow at a CAGR of 6.8%, reaching \$14.5B by 2033 (source: Grand View Research). Growth is driven by rising fungal infections and the demand for safer, more effective treatments.

Target Industries

1) Pharmaceutical companies developing topical antifungal treatments, 2) Research institutions focusing on nanoparticle drug delivery, 3) Healthcare providers integrating advanced pharmaceutical solutions.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,

BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913