

Technology of Eco- Friendly and Low sludge – based Wall Putty



Technology in Brief

India generates approximately 13 million tons of paper annually, producing significant quantities of industrial waste. For every ton of paper produced, pulp and paper mills generate about 1.63 tons of lime sludge—a byproduct posing serious environmental challenges due to limited and costly landfill space.

To address this, a sustainable solution has been developed: **lime sludge-based wall putty**. Rich in calcium carbonate, lime sludge is blended with eco-friendly admixtures such as MHEC/HPMC, RDP/VAE, and white cement to produce high-performance wall putty. This innovative product has demonstrated excellent plasticity, workability, and water retention, making it suitable for both interior and exterior wall applications.

Utilizing lime sludge in wall putty not only minimizes industrial waste but also offers a low-cost, ecoconscious alternative in the construction industry.

Salient features/Advantages

- Waste Utilization.
- ➤ Eco-Friendly.
- Cost-Effective.
- > High Calcium Content.
- > Enhanced Workability.
- Improved Water Retention.
- Versatile Application.
- > Compatible with Admixtures.
- Reduces Landfilling Burden.



Properties & Standards	Eco-friendly lime sludge-based wall putty is a cost- effective, sustainable material with excellent workability, water retention, and adherence to IS 15477:2019 standards.
End Product(s)	Lime sludge- based Wall Putty
License/Commercialization	M/s Ruchira Papers Limited, Trilokpur Road, Kala Amb, Sirmaur, Himachal Pradesh- 173 030
TRL	6
Environmental Impact	Sustainable/ environment friendly wall putty
Setup - Equipment required	Lime Sludge Dryer, Grinding facility, Pulverizer/Grinder, Weighing Scales, Storage Bins/Hoppers etc.