

Turn Your Brick-Dust API into an Effective Parenteral Treatment with Apisolex™ Polymer

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From Brick-Dust to Effective Drug Product

Even in the final stages of development, many promising APIs fail due to poor physicochemical properties.

Poor aqueous solubility and bioavailability are common challenges in drug development, making many promising drugs impossible to formulate.

Finding scalable approaches to solve these issues is critical to achieve clinical efficacy and to expedite a new drug or 505(b)(2) to market.

90%

Up to 90% of new chemical entities (NCEs) suffer from poor aqueous solubility.

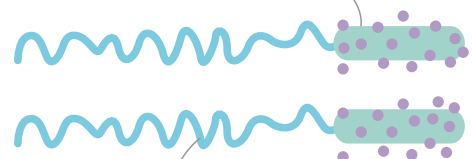
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Nanoencapsulate your Brick-Dust API with Apisolex™ Polymer

Lubrizol Life Science (LLS) Health's Apisolex polymer is the newest addition to its excipient family. By adding solubility enhancing polymers, we're adapting to market needs and continuing our legacy of over 40-years experience in creating innovative, reliable, and differentiated solutions.

Apisolex excipient's robust IP estate provides a powerful tool for drug formulators to unlock the potential of brick-dust APIs and get parenteral drug formulations to market.

Hydrophobic block of the amphiphilic polymer binds to your API.



Hydrophilic tail of the Apisolex polymer is critical to the formation and biocompatibility of the polymeric micelle.

Hydrophobic head
Hydrophilic tail
API

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Solving Solubility Issues with Apisolex Polymer

Apisolex excipient's polyamino acid structure provides a non-toxic, non-immunogenic, and biocompatible alternative to traditional PEG-based excipients.

Designed to work with straight-forward formulation techniques, Apisolex technology provides many benefits, including:

- High drug loading, up to 40%
- Minimal API loss
- Stable, lyophilized drug products
- Saline reconstitution in <30 seconds

x50K

Apisolex technology increases the solubility of hydrophobic APIs by up to 50,000-fold, for both amorphous and crystalline APIs.

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Add Value with Apisolex Polymers for Patient-Centric Treatments

As the fight against cancer and orphan diseases continues, many promising APIs are being funded, developed, improved, or repurposed. To ensure vital yet insoluble drugs can be administered to patients, solutions such as Apisolex excipients are integral to realize their full therapeutic potential.

Apisolex polymers provide a simplified nanoparticle manufacturing technique that results in better drug products for patients.

Did you know?

The maximum tolerated dose of many oncology drug products is limited not only by API toxicity, but also by the toxicity of the vehicle and/or excipients.

Visit [Apisolex.com](https://www.apisolex.com) to discover how Apisolex technology can help you overcome solubility issues.