

# Apinovex™ Polymers

## Solubility-enhancing polymers for oral amorphous solid dispersions

Lubrizol Life Science Health's (LLS Health's) Apinovex™ polymers are high molecular weight linear polyacrylic acids that enhance the solubility of BCS Class II and IV APIs.

### Formulation Benefits

- High, stable drug loading (up to 80%) via spray drying.
- Significantly improved drug release profile compared to crystalline APIs.
- Enables IP protection and 505(b)(2) formulations/ lifecycle management.



### Processing Benefits

- Designed for standard spray drying and solvent-based processing.
- Soluble in water and common pharmaceutical solvents.
- Produces low viscosity solutions for ease of processing.

### Competitive Advantages

- **2x more drug loading** than other solubility-enhancing excipients (Soluplus® and AFFINISOL™ HPMC).
- **Up to 10x improvement in dissolution** for Apinovex dispersions compared to crystalline APIs.
- **Stable amorphous solid dispersions**, even after 6 months under accelerated conditions.

## Product Details

- Chemistry: High molecular weight polyacrylic acid
- Form: White powder
- Quality: IPEC Excipient GMP

## Oral Safety Profile

Apinovex chemistry is similar to LLS Health's IID-listed Carbopol® polymers, which have been used in oral drug products for decades.

Test	Results
Acute oral toxicity	Not acutely toxic (LD50 > 5000 mg/kg)
Mutagenicity in bacteria (AMES)	Non-mutageneic

For additional safety and toxicity data, contact our team.

## Key Properties

Property	Apinovex™ Polymer
Viscosity*, cP, 25 (°C)	100 - 460
Loss on drying, %	3.0 max
Residual solvent, % Ethyl acetate	0.5
Tg (°C) - first heat cycle	128
Tg (°C) - second heat cycle	130

\*Brookfield RVT, 20 rpm, 4 wt% mucilage, neutralized to pH 7.3-7.8

## Solvent Compatibility

Apinovex polymers are soluble in common pharmaceutical solvents

Solvent system	Apinovex™ concentration
Ethanol	15% w/w
Isopropanol	10% w/w
Ethanol/Acetone 1/1	10% w/w
DCM/Ethanol 1/1	10% w/w

# Request your sample today

Contact our Team directly or visit [apinovex.com](https://apinovex.com) to learn more.

