

PVOH Seed Coating Applications

About Polyvinyl Alcohol (PVOH)

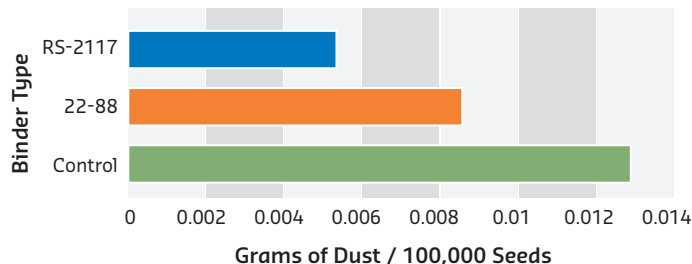
The physical and chemical properties are what make PVOH very versatile, and ideal for use in seed coating. It features water-solubility, excellent film forming characteristics, high tensile strength and elasticity, as well as resistance against organic solvents and dispersing power.

Why PVOH for Seed Coating Applications?

When you coat seeds with polyvinyl alcohol, they are protected from outside elements until they meet the ideal moisture and temperature so the seed can successfully germinate. More efficient than starch, polyvinyl alcohol coatings are coated in a variety of ways, decrease dusting, and improve germination.

Low Dust-Off Properties

Graph 1. Dust-Off Properties of soybean seeds coated with the anionically modified polyvinyl alcohol (80-18) of this invention.



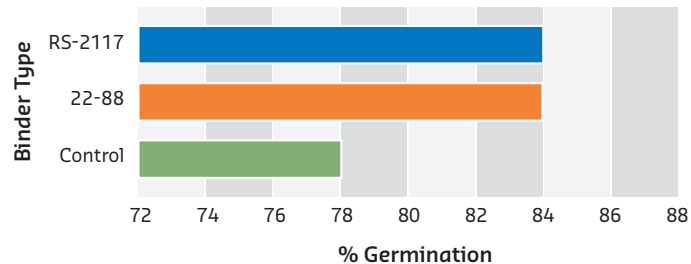
Polyvinyl Alcohol's Unique Characteristics in Seed Coatings

- ▶ Low-dust off properties
- ▶ Improved germination
- ▶ Ease of use
- ▶ Superior binding agent

Improved Germination

Sometimes when planting seeds, there is a need for germination delays. Using PVOH to delay germination until you reach the ideal temperature and moisture content of the soil allows the seed to have the highest chance for survival, increasing efficiency in planting for the modern farmer. Polyvinyl alcohol can adjust its hydrolysis, allowing for the seed's coating to have a customizable moisture content.

Graph 2. Cold Germination of soybean seeds coated with the hydrophobically modified polyvinyl alcohol of this invention.



Why KURARAY POVAL resins?

Kuraray is committed to product quality, innovation, and the ability to provide global solutions to our customers. We produce high-quality, low VOC and ash-content PVOH with the most narrow and strict specifications. We create unique, tailor-made products for our customers and are often sought out to be partners in innovation. We can second source from around the world, as well as leverage our local sales, logistics, and R&D teams in Europe, Asia, and the Americas. Kuraray is committed to developing new fields of business using our pioneering technologies like Polyvinyl Alcohol that will improve the environment and enhance the quality of life for individuals around the world.



**FOR
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Here to Innovate

PVOH

Seed Coating Applications

