

Selvol™ Seed Coatings

Highly Functional, Eco-Friendly Seed Protections

To realize the benefits of using Selvol™ Polyvinyl Alcohol in seed coating, it must be properly prepared before use. Our simple solubilization procedure will ensure proper dissolution and optimal performance.

Starter Seed Coating Recipe

4% solution of SELVOL™ Polyvinyl Alcohol 203, 205, 523 or 540 in water

Additives per customer design

Apply coating via:

- Stir-in
- Spray dryer
- Fluidized bed
- Drum coater
- Others

Seeds may be dried via:

- Convection oven
- Tumble dryer
- Other

If seeds are sticky, coat with a light layer of talc



Creating a Selvol Solution

- The preferred dissolving method is by steam jacket.
- Direct injection steam or electrical heated jacket is also sufficient.
- Begin with water at room temperature (~25.0 °C).
- Ensure proper agitation and good surface movement of the water (overhead mixers preferred)
- Slowly charge the PVOH into water under agitation. Ensure PVOH does not sit on the surface of the water or fall to bottom of tank.
- After charging, allow 5 – 10 minutes of mixing the slurry without heat.
- Slowly heat solution to the minimum cook out temperature (see table) and cover to minimize water loss.
- Hold minimum cook temperature for 30 – 60mins to allow dissolution.
- Allow the solution to cool under agitation.
- Filter using a mesh screen to catch any undissolved particles.
- Add a biocide if you intend to keep the solution for more than one day.

Recommended Selvol PVOH Grades and Solution Properties

Grade	Viscosity	% Hydrolysis	% Max Solids	Min Cook Temp
Selvol 203	3.5-4.5	87.0-89.0	30	185 °F (85 °C)
Selvol 205	5.2-6.2	87.0-89.0	20	185 °F (85 °C)
Selvol 523	23.0-27.0	87.0-89.0	10	185 °F (85 °C)
Selvol 540	45.0-55.0	87.0-89.0	7	185 °F (85 °C)