Selvol Grade	Viscosity	% Hydrolysis
Super Hydrolyzed		
125	28.0-32.0	99.3+
165	62.0-72.0	99.3+
Fully Hydrolyzed		
103	3.5-4.5	98.0-98.8
107	5.5-6.5	98.0-98.8
310	9.0-11.0	98.0-98.8
325	28.0-32.0	98.0-98.8
350	62.0-72.0	98.0-98.8
Intermediate Hydrolyzed		
418	14.5-19.5	91.0-93.0
425	27.0-31.0	95.5-96.5
443	53.0-63.0	92.0-94.0
Partially Hydrolyzed		
502	3.0-3.7	87.0-89.0
203	3.5-4.5	87.0-89.0
504	4.0-5.0	87.0-89.0
205	5.2-6.2	87.0-89.0
513	13.0-15.0	87.0-89.0
518	17.5-20.5	87.0-89.0
523	23.0-27.0	87.0-89.0
540	45.0-55.0	87.0-89.0
Fine Particle (S-Grade)		
165SF	62.0-72.0	99.3+
203S	3.0-3.7	87.0-89.0
205S	3.5-4.5	87.0-89.0
513S	13.0-15.0	87.0-89.0
523S	23.0-27.0	87.0-89.0
540S	45.0-55.0	87.0-89.0
Specialty - Polymerization		
805	5.2-6.2	87.0-89.0
818	17.0-21.0	87.0-89.0
823	23.0-27.0	87.0-89.0
830	29.0-35.0	87.0-89.0
840	45.0-55.0	87.0-89.0
Specialty - Textile		
WS-724	13.0-24.0	91.0-95.5
WS-53NF	18.5-29.0	86.0-90.0
Specialty - Tackified		
	pH	Viscosity
ML7	4.4 - 4.9	40-65
MM51	4.4 - 4.9	1100-1500
MM81	4.4 - 4.9	1300-1700
MH82	4.4 - 4.9	4200-5900
Celvol Solutions		
	% Solids	Viscosity
08-125	7.0-8.0	100-1300
15-103	14.5-15.5	50-500
09-325	8.0-9.0	200-1300
09-523	8.5-9.5	250-1300
05-540	4.75-5.25	50-300
21-205	20.0-22.0	800-1300
24-203	23.0-25.0	250-1300

Sekisui Specialty
Chemicals America, LLC

SEKISUI

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1501 LBJ Freeway, Suite 530
Dallas, TX 75234

SELVOL™
POLYVINYL ALCOHOL

Solubility Guidelines

Granular

Sekisui Technical Service
Samples@Sekisui-sc.com

SELVOL™
POLYVINYL ALCOHOL

Solubility Guidelines

Directions

- 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° 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.

Please AVOID

- Don't use magnetic stir plates or hand-stir to dissolve PVOH, this is not enough agitation
- Don't pre-heat the water, water must begin at room temperature
- Don't heat the vessel while charging the PVOH
- Don't dump the PVOH into water, too fast addition may cause lumping
- Don't store in containers which are susceptible to rust
- Don't store high concentration solutions of PVOH for long periods of time, they are prone to gel.

Technical Support Questions?

@ Samples@sekisui-sc.com

Selvol Grade	Maximum Solids	Minimum Cook Temp
103	30%	200 °F (93 °C)
107	20%	200 °F (93 °C)
310	15%	200 °F (93 °C)
125	10%	205 °F (96 °C)
325	10%	200 °F (93 °C)
165	7%	205 °F (96 °C)
350	7%	200 °F (93 °C)
418	12%	195 °F (91 °C)
425	10%	195 °F (91 °C)
203	30%	185 °F (85 °C)
502	30%	185 °F (85 °C)
205	20%	185 °F (85 °C)
805	20%	185 °F (85 °C)
513	15%	185 °F (85 °C)
523	10%	185 °F (85 °C)
823	10%	185 °F (85 °C)
540	7%	185 °F (85 °C)
840	7%	185 °F (85 °C)